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COPY FOR ADVERTISEMENTS.

Advertising copy (changes or new advertisements) should reach us Saturday Morning to insure insertion in the issue of the following week. For the first issue in the month we should receive copy by Friday Morning of the week preceding.

The authoritative announcement that the sufferers from the storm at Birmingham, Ala., are not in need of outside contributions is typical of the spirit which has made Birmingham the great industrial city that it is. The storm of last Monday, which swept through part of the city and some of the nearby towns, killed eighteen persons and injured thirty-five others, and wrought a property damage of between \$250,000 and \$300,000. The Birmingham people immediately started a relief fund for the sufferers. The same prompt action may be expected for the recovery from the damage to property, so that nothing shall impair the prestige of the thriving iron center.

Southern Farm Growth.

On another page of this week's Manufacturers' Record Mr. L. G. Powers, chief statistician in charge of agriculture for the twelfth census, makes an interesting exhibit of the agricultural progress of the South during the last decade. He shows that while in the Northern States nearly 80 per cent. of the increase of population was in cities, villages and hamlets, the gain in rural population in the South was 65 per cent. of the whole, and of urban population 35 per cent. The rural population in the fourteen Southern States increased between 1890 and 1900 by 2,640,724, or 17.4 per cent. Accompanying this increase is an increase in the number of farms in the South, indicating a rise of families from farm laborers to tenants or owners, an enlargement of farm acreage to 290,000,000 and of improved land to not less than 130,000,000, and probably to 150,000,000. While the actual gain in farm wealth has been greater elsewhere, it is expected that the figures for 1900 will show that the relative gain of the South in all farm values, with the exception of that of live-stock, has been greater than that for the nation as a whole. And as Mr. Powers points out, with the opening of new lands, the

creation of small holdings from old plantations, with the extending use of improved machinery, it is evident that Southern farm resources have increased in the past ten years to a wonderful extent, and that their total will exceed \$4,500,000,000.

Though the point is not touched upon by Mr. Powers, the final figures of the census may be expected to give some explanation of the evolution in Southern agriculture now under way. This explanation will be had in the growth of Southern manufacturing industries, the extension of lumbering, with the cleared lands turned into farms, and the development of railroad construction, giving farmers ready access to markets.

Commercial Straws Abroad.

American consular representatives are watching closely the developments of the agrarian movement in Germany, in which the grain-growers of the United States are particularly interested. Consul-General Guenther at Frankfort alludes to a suggestion in the St. Petersburg Novoe Vremya that Russia and the United States should come to an agreement with reference to supplying European markets rather than compete with each other, and adds that the United States should note that danger threatens it from Germany, as agrarians are seeking to compensate Russia at the expense of the United States. This, of course, refers to the proposed higher duties on cereals imported into Germany. The significance of Mr. Guenther's words appears in the fact noted by his vice-consul-general to the effect that the German-Russian Association, comprising a large number of chambers of commerce and firms in Germany, organized to stimulate German exports to Russia, has presented a memorandum to the Imperial Chancellor of Germany urging measures discriminating in favor of Russian grain in case the tariff on imported foodstuffs is increased; and the hope is expressed that this preferential treatment will induce Russia to make tariff concessions on German goods, so that the existing conditions of trade between the two countries, by which the value of exports of German merchandise to Russia has increased during the last decade from \$43,554,000 to \$87,108,000, may continue.

In Austria-Hungary also is a strong element which views with displeasure the increasing imports of American commodities coming into direct competition with Austrian products. United States Consul Frederick W. Hossfeld at Trieste reports that representatives of the Austrian iron and steel industry have demanded higher import duties upon American iron and steel ware; that the owners of olive groves have combined with refiners of edible oils in a demand for a material increase in the duty on all substitutes for olive oils, the aim being to prohibit absolutely the importation of American cottonseed

oil, and that butchers and packers are protesting against the incoming of foreign meats. Mr. Hossfeld traces this agitation to the agrarian element, and expresses a belief that the new tariff laws of the monarchy will be framed especially against American products unless the manufacturers and the laboring classes of Austria, one in fear of American retaliation and the other of a rise in the cost of necessities of life, make a vigorous protest against the policy. As Austria buys from us much more than she sells to us, her economists do not fear retaliation, but in the case of Germany and Russia the United States can afford to keep its eyes open. The Frankfort Chamber of Commerce makes the following significant statement:

The harbor authorities of Calcutta advertised for bids on locomotives. The lowest English bid was 30,880 marks (\$7349) for each locomotive, to be delivered within nine months; the lowest American bid was 25,200 marks (\$5995), delivery within six months. The American firm received the contract. The contract for furnishing a large quantity of cast-iron pipes for the Dutch colonies was some time ago awarded to an American firm, which underbid German competitors nearly 25 per cent. Lately large orders for rails were placed in America from Holland. Even the English government is obliged to give Americans the preference over their own works on account of lower prices and quicker delivery, as in the construction of the Uganda bridges. American competition will be felt, especially in the Chinese market, after the cessation of hostilities. A number of new steamers are already being built for the trade between San Francisco and Japan and China.

Should Germany place duties upon grain, discouraging American trade in that direction, and at the same time encourage Russia to buy German manufactured goods, the foreign commerce of the United States might be affected, especially if there should be at the same time an understanding between Germany and Russia in China. The situation seems to be sufficiently suggestive to warrant careful consideration by the business interests of this country.

In an interview at Atlanta Gen. John Gill, president of the Mercantile Trust & Deposit Co. of Baltimore, made a point which is not always prominent in discussions of proposed municipal improvements. He said that within twenty or thirty years Atlanta would have a population of between 200,000 and 300,000, and that fact should be borne in mind by the municipal authorities when providing for electric or gas lighting, street railways and other improvements. The perfect system of sewerage, of lighting or of water supply in a city today is likely to be inadequate for the same city twenty years from now. There are many communities in the South which may be reasonably expected to increase their population in the next twenty years. Such cities, in providing for municipal conveniences, should see to it that present expenditures may not have to be duplicated hereafter, and that the improvements shall take such form as

that they may be readily extended or enlarged, as the occasion may require.

For Manual Training.

The city council of Shreveport, La., has appropriated \$2200, which, with funds derived from other sources, has been used to install the apparatus for instruction in manual training as a part of the public-school system of the city. Alluding to that fact, the New Orleans States says:

Students and thinkers have frequently called attention to the aimlessness of modern education as exemplified in most of our institutions from primary schools to universities. About every other boy educated expects to become President of the United States after he has filled every position lower than that, and but few aspire to become good mechanics, farmers, draughtsmen, engineers, architects and such other useful members of society. We are educating too many doctors and lawyers and clergymen and politicians, and not enough blacksmiths and shoemakers and woodworkers and men of kindred trades. The old-time requirement that every boy should learn a trade is just as important now as it ever was, and the education which neglects this, or which—as is the tendency of much of the education of today—unfits a boy for such trades, is not the kind of education that the poor boy needs. Even should a boy become President, it will be no disadvantage to him to have become familiar with a trade when at school, while the vicissitudes of life are such as to render it almost a crime for the parent who is able to do otherwise to leave his boy unprovided with the means of earning an honest livelihood.

To the establishment of a cotton mill at Shreveport is traced the impetus given to this provision for manual training, which is another indication of the power of the cotton mill as an educational factor. It has been potent in the Piedmont region of the South, where cotton-mill owners have led in the establishment of textile schools, and it may be expected to be equally valuable in other parts of the South with the spread of the doctrine that the cotton factory should be as near as possible to the cotton field.

Production of Coke.

The United States Geological Survey has just published an interesting and thorough report by Mr. Edward W. Parker on the manufacture of coke in the United States in 1899. The phenomenal activity in the iron trade during that year stimulated the production of coke and resulted in an output of 19,668,569 short tons, an increase of 3,621,360 tons over the product of 1898. All of the more important coke-producing States shared in the increased production. The advance in the South in ten years may be noted in the following table of production in short tons by States:

State.	1889.	1899.
Alabama.....	1,030,510	1,787,809
Georgia.....	94,727	50,907
Kentucky.....	13,021	81,095
Tennessee.....	359,710	435,308
Virginia.....	146,528	618,707
West Virginia.....	607,880	2,278,577
Total.....	2,252,376	5,252,408
United States.....	10,259,022	19,668,569

These figures show that while the production increased in the ten years something more than 91 per cent. in the

country, the increase in the South was more than 133 per cent. In the country outside the South the increase was 80 per cent.

The Southern Farm Magazine.

In the discussions of educational problems, never more intense than at present, there is too often a neglect of the main point, the necessity for fundamental training in the home, without which other educational energies run the risk of misdirection and failure. The importance of this feature of education is dwelt upon in two articles published in the April number of the Southern Farm Magazine. They approach the subject from different directions, but their conclusions are in general harmony. In one, Miss Emma Beall Culver of Auburn, Ala., tells of the part which Southern women are to play in the task of training the young properly. She goes to the root of the matter for the purpose of impressing the conviction that upon the mothers and home influences rests largely the responsibility for the welfare and happiness of the rising generation. They, and they alone, can give the right tone to the mind and heart of children, without which training may be futile. The natural inference from her argument is that the teaching quality is peculiarly that of woman, and that provision must be made for the right sort of mothers, so that the right sort of children may be ready for the training in the larger life beyond the home. In lighter vein Mr. Edward Ingle approaches the subject from the route of the servant question. Far-reaching as it is in its effects, and grounded in defective training of employers and employees alone, he brings in comparison the obvious feelings of both classes as a basis for the suggestion that the trials of each may be lightened, if not overcome, by the common teaching of general housework to boys and girls. Both articles ought to have effect for practical good.

Another interesting and practical article is by Col. J. B. Killebrew, who deals with practices in agriculture detrimental to success. He sharply criticizes the habit of wearing out land by improved cultivation, the diminishing of the timber supply by clearing up fields, and the attempt to cultivate too much land. His conclusions are that no more land should be cleared than the actual demand for firewood may require; that all old fields should be enriched, and that less land should be planted, so that it may be more thoroughly cultivated.

A paper by Prof. S. A. Knapp, read before the recent rice convention at Lake Charles, La., points to prospective markets for rice, and is encouraging to the men in the Southwest who are changing the face of agriculture in that region.

A review of the South's production, both industrial and agricultural, presents a mass of valuable facts encouraging to everybody who has faith in the great future of the South, the products of agriculture alone reaching a value of more than \$1,200,000,000.

The regular departments of the Magazine are filled with entertaining matter for old and young, and the month's issue contains also many articles bearing upon the manifold energies now exerted in the agricultural South.

The Southern Farm Magazine is published monthly by the Manufacturers' Record Publishing Co., Baltimore, Md. Price \$1 a year.

The sewerage and water board of New Orleans has extended the time for the completion of the sewerage and waterworks to seven years from July 1, 1901.

AGRICULTURAL PROGRESS IN THE SOUTH.

By L. G. Powers, Chief Statistician in Charge of Agriculture for the Twelfth Census.

[Written for the Manufacturers' Record.]

For the southern portion of the United States the last decade was in some respects the most noteworthy of any in the nineteenth century. Its progress in population and material resources, when compared with the corresponding advance of the other States and Territories, merits special consideration.

The fourteen Southern States—Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, South Carolina, Tennessee, Texas, Virginia and West Virginia—in 1890 contained a total population of 19,370,094. In 1900 that population was 23,271,689. The ten years witnessed an increase of 3,901,595, or 20.1 per cent. The corresponding percentage of increase for the other States and Territories was 21.7, and for the nation as a whole 21. For the Northern States nearly, if not quite, 80 per cent. of the increased population were located in cities, villages and hamlets, and only about 20 per cent. were domiciled upon the farms. In the Southern States the movement of population was of the opposite character. The gain in rural population, that is, outside of cities, villages and hamlets, constituted 65 per cent., while that of the cities, villages and hamlets, or urban population, was only 35 per cent. of the total increase. The rural population in the Southern States increased from 15,127,555 in 1890 to 17,768,279 in 1900. This was an addition of 2,640,724, or 17.4 per cent., or nearly the same as that of the total population. In the other States and Territories the percentage of growth in rural population is given in the accompanying table as only 9.2. The gain in rural population in those States, from 20,687,453 in 1890 to 22,596,334 in 1900, includes all the reported increase in the incorporated townships in Massachusetts and Rhode Island, many of which contain fair-sized cities and villages. If the census statistics in these latter States were reported on the same basis as in the Southern States, the increase in the rural population in the Northern and Western States would unquestionably be not 9.2 per cent., but less than 7 per cent. The relative addition to the rural or agricultural population in the South was therefore more than twice that in the North and West. That population, as may be seen from Table I, increased during the decade in every one of the Southern States.

TABLE I.—AN EXHIBIT FOR THE YEARS 1890 AND 1900 OF THE TOTAL POPULATION AND OF THE RURAL POPULATION OF FOURTEEN SOUTHERN STATES AND OF THE OTHER STATES AND TERRITORIES OF THE NATION, TOGETHER WITH THE PERCENTAGES OF GAIN FOR EACH.

States and Territories.	Total population.		Per cent. increase or decrease.	Rural population.		Per cent. increase or decrease.
	1900.	1890.		1900.	1890.	
Alabama.....	1,328,697	1,513,017	20.8	1,508,605	1,274,097	18.4
Arkansas.....	1,311,564	1,128,179	16.2	1,088,548	975,862	10.2
Florida.....	528,542	391,422	35.0	367,841	278,793	31.9
Georgia.....	2,216,331	1,837,353	20.6	1,676,113	1,450,391	15.6
Kentucky.....	2,147,174	1,888,636	15.5	1,512,054	1,367,572	11.5
Louisiana.....	1,381,625	1,118,587	23.5	948,611	773,075	22.7
Maryland.....	1,190,060	1,042,390	14.2	841,734	481,179	12.6
Mississippi.....	1,551,270	1,289,600	20.3	1,324,022	1,142,502	15.8
North Carolina.....	1,893,810	1,617,947	17.1	1,555,185	1,400,288	11.1
South Carolina.....	1,340,316	1,151,149	16.4	1,079,053	961,342	12.2
Tennessee.....	2,030,616	1,767,518	14.3	1,617,437	1,402,922	15.3
Texas.....	3,048,710	2,235,523	36.4	2,268,701	1,658,684	42.8
Virginia.....	1,854,184	1,655,980	12.0	1,427,308	1,330,468	7.3
West Virginia.....	958,800	762,794	25.5	753,067	630,380	19.5
Southern States.....	23,271,689	19,370,094	20.1	17,768,279	15,127,555	17.4
Northern and Western States.....	62,725,998	43,432,418	21.7	22,596,334	20,687,453	9.2
Nation.....	75,997,687	62,802,512	21.0	40,364,613	35,815,008	12.7

Of the fourteen States mentioned, Virginia registered the smallest relative increase. Its percentage of gain was 7.3. This seems small in comparison with the corresponding percentage of Florida or Texas, and yet it was substantially the same as that of the Northern and Western States as a whole, and of those States, ten—Maine, New Hampshire, Vermont, Connecticut, New York, New Jersey,

Ohio, Michigan, Nebraska and Kansas—had a smaller rural population in 1900 than in 1890. The net gain in the rural population of the fourteen Southern States was 2,640,724, while that for the other States and Territories was only 1,908,881. If Oklahoma and Indian Territory are included in the Southern States, as they are in nearly all official publications, and allowance made for the inclusion in Massachusetts and Rhode Island of urban populations in township reports, it will be found that the relative increase in the Southern agricultural population in ten years is about four times that of the remainder of the nation. With such a large actual and relative gain in rural population, the student of social and economic subjects is at once made aware of the enormous strides in the development of the agricultural resources of the South in the closing ten years of the century.

The data gathered by the twelfth census, which will show the exact proportions of the Southern agricultural progress, are not yet ready for publication, and will not be fully tabulated until near the close of the current year. Enough census data, new and old, are, however, at hand to enable a careful student to make a fairly correct forecast of a few of the facts that will be brought very prominently to public attention by the final census figures. The reader's attention is called to the accompanying Table II for some of them:

TABLE II.—AN EXHIBIT FOR THE YEAR 1890 OF THE NUMBER OF FARMS AND FARM FAMILIES, AND FOR 1900 OF THE NUMBER OF FARM SCHEDULES REPORTED TO THE CENSUS OFFICE, TOGETHER WITH PERCENTAGES OF INCREASE OF THE LATTER OVER THE FORMER.

States and Territories.	Farms.	Farm families.	Farm schedules.	Percentage of increase of farm schedules over
	1890.	1890.	1900.	1890.
Alabama.....	157,772	166,690	224,517	42.3
Arkansas.....	124,760	146,970	179,202	43.6
Florida.....	34,228	36,625	41,021	19.9
Georgia.....	171,071	175,688	225,522	31.8
Kentucky.....	179,264	188,560	236,978	32.2
Louisiana.....	69,294	79,705	116,135	45.8
Maryland.....	40,798	41,372	46,593	14.2
Mississippi.....	144,318	161,080	230,151	59.5
North Carolina.....	178,359	182,791	222,293	24.6
South Carolina.....	115,008	117,405	158,676	37.9
Tennessee.....	174,412	183,726	223,788	28.3
Texas.....	253,282	248,782	253,283	11.0
Virginia.....	127,600	132,750	170,106	33.3
West Virginia.....	72,773	76,157	93,756	28.9
The Southern States.....	1,817,783	1,938,341	2,422,021	33.2
The Northern and Western States.....	2,743,853	2,829,838	3,359,967	22.3
The Nation.....	4,561,636	4,767,179	5,781,988	26.7

In this table there are given in parallel columns the number of farms and the number of farm families reported for the census of 1890, and the number of regular

more nearly approximated the facts than did those showing the number of farms. Table II, in addition to the three columns of figures referred to, contains percentages showing the excess of the number of farm schedules returned in 1900 over the number of farms and farm families reported in 1890.

Of the 5,781,988 schedules returned in 1900, each was supposed by the enumerator to represent a farm. Some of the tracts of land reported on these schedules, however, are not farms. Many are house-lots or tracts of unproductive land, and will be rejected from the final compilations. The number thus rejected will be from 2 to 5 per cent. of the whole, and hence it can be asserted with positiveness that the total number of farms reported by the census of 1900 will be slightly in excess of 5,700,000, of which nearly, if not quite, 2,400,000 are located in the fourteen Southern States.

If the number of farm families reported in 1890 is taken as the basis of comparison, it will be found that the number of farms has probably increased in ten years in the United States somewhat less than 1,000,000; while if the number of farms reported in 1890 is assumed as the basis of comparison, that increase is approximately 1,200,000. The larger figures must be used in making estimates of the acreage and value of farms, and the smaller ones in forming a fairly correct concept of the actual progress of the nation in the last decade. For the purposes of this article the larger figures are employed. Of the gain of 1,200,000 farms, the fourteen Southern States include substantially one-half. The relative gain of the South is greater than that of the remainder of the nation. This

is shown by the fact that the percentage of gain in the South in ten years was 33.2, while that of the other States and Territories was only 22.3, or two-thirds as much.

If Oklahoma and Indian Territory are included with the Southern States the increase in the number of farms will be substantially twice that of the rest of the nation, although the sixteen States and Territories include, with Delaware and the District of Columbia, somewhat less than one-half of the number of farms and the aggregate of farm wealth in the country. With the inclusion of these Territories, the percentage of gain in the South would be over 40, while that for the other States and Territories would be less than 18.

The percentage of increase in the rural population—Table I—in both the North and South is less than the increase in the number of farms. This fact indicates social and economic changes in all parts of the nation, in addition to the mere increase in the number of farms. Judging from the tables presented, this change will be found, when the census figures for occupation, farm tenure and the ownership of farms are tabulated, to indicate the rise of many families from the earlier

status of farm laborers in 1890 to that of farm tenants or owners in 1900.

Table III, for the years 1870, 1880 and 1890, presents, for the two sections of the nation and for the United States as a whole, a comparative exhibit of the number of farms, the acres of farm land and the acres of improved land in farms, together with the percentage of gain for each decade. By comparing the figures given in Tables II and III, it will be seen that the number of farms in the nation increased in the last decade, actually and relatively, more than in any previous decade.

TABLE III.—AN EXHIBIT FOR THE YEARS 1870, 1880 AND 1890 OF THE NUMBER OF FARMS, ACRES OF FARM LANDS AND ACRES OF IMPROVED LAND IN FARMS, TOGETHER WITH PERCENTAGES OF GAIN FOR THE SPECIFIED DECADES.

Divisions and years.	Farms. Number.	Per cent. of increase.	Acres in farms. Number.	Per cent. of increase.	Improved acres in farms. Number.	Per cent. of increase.
Southern States:						
1870.....	877,276		138,492,303		60,835,385	
1880.....	1,521,893	73.5	233,811,395	24.0	85,217,512	40.6
1890.....	1,817,783	19.4	253,932,007	8.6	106,629,914	25.1
Northern and Western States:						
1870.....	1,782,709		219,242,738		128,335,714	
1880.....	2,487,014	39.5	302,270,440	37.8	199,553,530	55.4
1890.....	2,746,858	10.4	369,286,612	22.2	250,986,841	25.8
Nation:						
1870.....	2,659,985		407,735,041		189,221,099	
1880.....	4,008,907	50.7	536,081,835	31.5	284,771,042	50.7
1890.....	4,564,641	13.0	623,218,619	16.3	357,616,755	25.9

ade with the exception of 1870 to 1880. The share of the Southern States in this increase has already been shown to be larger relatively than for the other sections of the country. Judging from these facts, it becomes very probable that the detailed figures for farm acreage, when compiled, will make a most creditable showing for the fourteen Southern States.

In the decade 1870 to 1880 the acres of farm land increased from 188,492,303 to 233,811,395, or 45,319,092 acres. In the next decade the acreage increased to 255,932,007, a gain of 22,120,612. Judging

gain, if population can be taken as a basis of estimate, must be as great as in the decade from 1870 to 1880. If that relative increase is chronicled, the improved acre of the South will be found to be 150,000,000.

Table IV presents for the two great divisions of the country, and for the United States as a whole, a comparative exhibit of the value of farms, implements and machinery, and of live-stock. For the year 1870 two sets of figures, one so-called currency values and the other gold values, are given. The paper money of

TABLE IV.—AN EXHIBIT FOR THE YEARS 1870, 1880 AND 1890 OF THE VALUE OF FARM LANDS AND BUILDINGS, OF FARMING IMPLEMENTS AND MACHINERY, AND OF LIVE-STOCK UPON FARMS, TOGETHER WITH PERCENTAGES OF INCREASE FOR THE SPECIFIED DECADES.

Divisions and years.	Land, fences and buildings. Values.	Per cent. of increase.	Implements and machinery. Values.	Per cent. of increase.	Live-stock. Values.	Per cent. of increase.
Southern States:						
1870.....	\$1,248,284,390		\$348,879,965		\$305,745,102	
1880.....	1,560,355,488		51,099,956		329,151,377	
1890.....	1,832,907,771	46.8	75,559,396	55.2	359,986,683	17.7
	2,520,703,898	37.5	92,434,880	21.8	506,126,429	40.0
Northern and Western States:						
1870.....	\$6,161,958,699		\$220,622,778		\$914,476,064	
1880.....	7,702,448,373		275,778,473		1,143,095,080	
1890.....	8,364,189,005	35.7	330,660,689	49.9	1,140,398,024	24.8
	10,758,548,751	28.7	401,812,587	21.5	1,703,641,144	49.4
The Nation:						
1870.....	\$7,410,243,089		\$269,502,743		\$1,220,221,166	
1880.....	9,262,803,861		336,878,429		1,525,276,457	
1890.....	10,197,096,776	37.3	406,520,065	50.8	1,500,334,707	23.0
	13,279,252,649	30.2	494,247,467	24.3	2,208,767,573	47.2

*Value expressed in gold; one-fifth less than currency value.

from the number of farm schedules returned, it is certain that the increased acreage of land reported in the last decade will exceed the gain in the preceding decade, and closely approximate, if not exceed, that of the memorable decade from 1870 to 1880. The total acreage in Southern farms will probably exceed 200,000,000, and may possibly approximate 300,000,000.

The marked increase in the rural population of the South, as shown in Table I, taken in connection with the fact of the increased use of improved farm machin-

the country was at a discount, and gold values were substantially one-fifth less than those expressed in currency. The percentages of gain shown in Table IV, as in Table V, are all based upon gold values. For the values of farms and for those of farm implements and machinery, those figures showing the relative gain were greater in the Southern States than in any other States and Territories. This was true for both of the decades ending with 1880 and 1890. The relative gain in live-stock values was, however, greater in the North in both decades.

TABLE V.—AN EXHIBIT FOR THE YEARS 1870, 1880 AND 1890 OF THE VALUE OF ALL FARM RESOURCES, TOGETHER WITH PERCENTAGES OF GAIN FOR THE SPECIFIED DECADES.

Year.	Southern States. Total farm values.	Per cent. of increase.	Northern and Western States. Total farm values.	Per cent. of increase.	Nation. Total farm values.	Per cent. of increase.
1870.....	\$1,602,909,457		\$7,297,057,541		\$8,899,966,998	
1880.....	2,003,636,821		9,121,321,936		11,124,958,747	
1890.....	2,268,753,820	41.5	9,835,247,718	34.7	12,104,001,538	36.1
	3,118,269,207	37.4	12,863,998,482	30.8	15,982,267,689	32.0

*Value expressed in gold; one-fifth less than currency value.

ery, makes it certain that there has been an unprecedented gain in the acres of land under cultivation, and hence of so-called improved lands in the South. This acreage in the fourteen Southern States was for the years 1870, 1880 and 1890, 60,585,385, 85,217,512 and 106,629,914, respectively. The net reported gain was for the first decade mentioned 24,632,127, and for the second 21,412,402. The increase in the number of farms, as shown by the reported farm schedules, and the increase in rural population, makes it cer-

tain that the increase in the last decade in improved land is greater than in either of the other decades. If the final figures fail to show such a gain, it may be concluded that there was an error in the figures of the earlier years, owing to the lack of definite instruction to the enumerators as to the meaning of the term "improved land." Taking all the available facts into consideration, the writer estimates the acres of improved land in the fourteen Southern States in 1900 at not less than 130,000,000. The relative increase, as shown by its percentage of

Table V gives for the sections of the country the totals of the figures shown in Table IV. An examination of the figures will disclose the actual progress of the Southern States in farm resources as compared with the Northern and Western States and the nation as a whole. The actual gain in farm wealth in both decades shown in the tables was greater in the Northern and Western States than in the Southern. The relative gain, as shown by the percentages of increase, was in both decades larger in the South.

Judging from the progress illustrated by Tables I and II, IV and V, it is predicted that the South in 1900 will show, as in other decades, a percentage of gain in all farm values, with the exception of that of live-stock, greater than for the nation as a whole. The actual increase in farm wealth in the fourteen Southern States in the preceding thirty years was as follows: The gold value of Southern resources in 1870 was \$1,602,909,457; in 1880 it had risen to \$2,268,753,820, and in 1890 to \$3,118,269,207. With the opening up of new lands, the subdivision of old plantations into smaller holdings, and the consequent appreciation of farm values, it becomes evident that the Southern farm resources have increased in the last ten years with a percentage greater even than in the decade from 1870 to 1880, and that the census figures, when published, will show for the year 1900 a total exceeding \$4,500,000,000. This total may possibly closely approximate \$5,000,000,000.

ANOTHER BURST OF OIL.

The Second Gusher in the Beaumont Field at Work.

[Special Dispatch to Manufacturers' Record.] Beaumont, Texas, March 27.

Unexpectedly gusher No. 2 of the Beaumont oil field came in early yesterday morning. This well was being bored by Sturm Bros. of Corsicana for the Texas Western Oil Co., composed principally of Galveston and Corsicana people. The well is on the E. H. Adams tract of ten acres, and is about half a mile to the northeast of the Lucas gusher. Sturm Bros. are experienced well borers, having bored the first well in the Corsicana field, but were taken completely by surprise when the well came in. Relying on the report that the Lucas well was 1300 feet deep, they had not even attached a gate valve to their well, which accounts for the fact of the oil gushing forth when they had attained a depth of 1050 feet. The oil started at half-past five, but it was not until half-past nine that a gate valve was procured and successfully put on, thus stopping the flow. This could not have been accomplished with ease had the well blown the inside piping out, as was the case with the Lucas gusher.

The Texas Western well, however, has a six-inch casing all the way to the bottom of the well, and the four-inch pipe inside of this, to which was attached the drill, also goes to the bottom. This prevented the oil spouting as heavily as the Lucas well, because the oil could only come up between the two pipes, a space about three-quarters of an inch in width. The oil is said by eye-witnesses to have spouted even under these conditions to a height of forty feet. The capacity of the well flowing under these conditions was figured to be 20,000 barrels, and oil men have stated that, in their opinion, had it been allowed to flow it would have exceeded the Lucas in capacity, which is conceded to exceed 50,000 barrels. The well passed through seventy feet of pure sulphur, a new condition in this field.

It is known that three or four other wells have reached the oil-bearing stratum, and the oil borers themselves admit that a "strike" may be expected now any day. Gladys City No. 2 has reached a depth of 980 feet, and in three or four days should develop. Guffy No. 2 is down pretty deep, and Captain Lucas is quoted as saying that the coming week should determine whether this would be a gusher or not. He expects to strike oil within a few days on this well. It should be definitely known, therefore, within a week or ten days whether further strikes can be expected, and also something respecting their nature. The two wells expected to come in first are the Guffy No.

2, being sunk by Hamill Bros., the borers of the "gusher," and who are now in the oil stratum, and that of J. C. Stribling, which is passing through the rock stratum supposed to exist just above the sand stratum in which the oil is found.

The well on the Stockwell-Davis tract, which is being bored by Sturm Bros. for Stratford Bros., penetrated to a depth of 1000 feet and then stuck, but the difficulties have been overcome, and within a week it should be known what can be expected in that part of the field, about twenty miles south of the Lucas well.

SOUTHERN IRON AND STEEL.

Developments of the Week in the Birmingham District.

[Special Cor. Manufacturers' Record.] Birmingham, Ala., March 26.

The first half of the past week there was not the same activity in iron that prevailed the preceding week. Buyers seemed to be acting on the belief that prices could not be maintained, and did not manifest much interest in the market. But as had previously happened, when the Western market showed a hardening tendency inquiry increased and led to a good business. When an advance was established at Western points interest increased in this market, and there was good buying. Large interests which had been holding out anticipating a sagging market came in and gave life to the buying, taking round lots, and conceding in several instances to deliveries to suit the sellers. There was a good contingent from the ranks of the smaller buyers who entered the market and supplied their wants at current values. The aggregate buying for the week was equal to, if it did not exceed, that of the preceding week, as more round lots were placed. And the outlook for a continuous good market is very encouraging. At the close of the week quotations were advanced 25 cents per ton, making gray forge \$10.50 to \$10.75; No. 4 foundry, \$10.75 to \$11; No. 3 foundry, \$11 to \$11.25, and No. 2 foundry and No. 2 soft, \$11.75. Basic iron is also \$11.75. No. 1 foundry and No. 1 soft are \$12.25 to \$12.50. With only moderate activity in the buying this week there will be another advance of 25 cents per ton. Gray forge sold at \$10.25 mainly, though some sold at \$10.50. One order for 10,000 tons at \$10.25 on Saturday was scaled down to 3000 tons and accepted. No. 4 foundry sold at both \$10.25 and \$10.50. One order for 5000 tons each of No. 3 foundry and No. 2 soft at \$11 and \$11.50, respectively, was accepted. Basic iron was in request, and sold at \$11.75. But this grade is difficult to obtain, as it is in very light supply, and anticipated output is sold for months to come. Only long-delivery orders are considered with favor.

Much of the buying the past week was to cover requirements for the last half of the year. Nearby deliveries are becoming more and more difficult to obtain. For steel the demand was also fine. On Friday 3000 tons were sold at \$21 per ton. The sales for the week will cover the output for several weeks. The changes made and being made at the mill have obviated all difficulties in the working of the mill, and satisfactory efficiency now obtains. A satisfactory agreement has finally been reached between the mill management and certain parties who desired to erect a steel-hoop plant. We can now consider this new industry as assured. It will be of considerable importance to the mill, as it will demand more and more steel as its business increases, and will be a valuable feeder.

Negotiations are pending looking to the consolidation of certain iron interests of importance. If it is successfully con-

cluded it will add materially to the production of the district.

Another furnace company has been incorporated under the name of the Central Coal & Iron Co. It has New York financial backing, and is officered by New York people. The company will build at least one furnace, and operate also in coal and coke. Tuscaloosa is offering inducements for the location of the furnace plant, but it will probably be located where all the material is in close proximity, say, at some point between this place and Tuscaloosa.

The Southern Cement Co. is turning out 400 barrels of cement daily. On its property is a fine deposit of limestone carrying 97 per cent. of carbonate of lime. It proposes to erect four lime-kilns of 150 barrels daily capacity and make lime as well as cement. The quality of the latter is attested by the fact that a contract for 30,000 barrels to go to New Orleans has already been secured. J. M. K.

Iron on an Upward Move.

Matthew Addy & Co. of Cincinnati report as follows:

"Last week was an exact repetition of the week that preceded it. It began quietly enough, with steady buying, however, which, continuing to steadily increase, culminated Friday and Saturday in a regular rush to cover. The tonnage booked during the last three days of the week was enormous, being for all kinds of iron, with gray forge probably in the lead. As a result on Saturday there was another advance of 25 cents per ton in the price of Southern iron. The present week is beginning like its predecessors, quietly, buyers waiting to catch their breath after the last advance. This does not mean, however, that the advance stopped buying, for purchases are being made at the new prices. Every day makes the strength of the market more apparent. A month ago there was hesitation on the part of consumers, who were in the habit of talking vaguely about a 'temporary spurt.' This thing is now entirely a matter of the past. Consumers have found that Northern furnaces are absolutely out of the market for five months to come, while in the South some grades of iron have been sold up solidly for six months ahead. The whole tendency of the market is upward."

WEST VIRGINIA COAL.

Development in the State in the Last Decade.

[Special Cor. Manufacturers' Record.]
Charleston, W. Va., March 25.

The development in West Virginia in the last two years has far exceeded the dreams of those who believed in West Virginia's commercial success. To be specific, we will give a few illustrations of the development of coal and timber.

The southern part of West Virginia, in the New River, Kanawha and Pocahontas fields, is furnishing the greatest illustration of the unprecedented increase in the control of one of the best coal productions in this State. We will briefly give our attention to the southern portion of the State. Kanawha county, which is among the older coal-producing counties, increased its production from 1,042,000 tons in 1897 to 1,500,000 tons in 1900. Fayette county increased its tonnage from 3,000,000 long tons in 1897 to upwards of 4,500,000 in 1900. McDowell county increased its tonnage from 2,600,000 tons in 1897 to 4,150,000 tons in 1900.

In 1892 the total coal produced in West Virginia amounted to 9,800,000 tons. This year it will amount to upwards of 22,000,000 tons. Fayette and McDowell counties alone last year produced as

much coal as the whole State did in 1892. These fields are illustrative of the wonderful advance of this State in the production of coal. The Chesapeake & Ohio and the Norfolk & Western railroads have each year increased their ability to carry coal, until today they are probably as well equipped for coal carrying as any companies in the world, yet both of these roads today have immense orders in the shops for increasing equipment for the carrying of coal.

The State is filled with the returning investors who did not purchase lands seven years ago, when it was at a minimum, and who are paying sometimes a hundredfold for the lands that they refused at that time. In Kanawha county the great Paint Creek valley is being developed, and nine great operations will be at work within the next four months, and every effort is being made by those investors to produce the most modern equipped coal-producing properties in existence. The Piney Creek development in Raleigh county is a splendid success, and four great operations are in process. Both of these streams will produce the hard, steam, the gas, the domestic and the coking coals.

At this date the only great valley in the State, that of Coal river, which has lain silent for so long amidst the wonderful development of the State, has taken on activity, and today there are four separate and distinct surveying corps which have for their object the immediate building of a railroad into this rich territory. Its heretofore silent valleys are permeated everywhere by the coal-land and timber dealers, and within a year this railroad development will open to commerce probably the richest coal-producing valley in the State of West Virginia.

On the Kanawha a half-dozen new operations have been begun this year, and great changes have taken place in properties near production. In the district lying contiguous to the Kanawha and New River districts on Cherry river the Baltimore & Ohio Railroad has made extensive developments, and the West Virginia & Pittsburg, under its present B. & O. ownership, will be extended and improved in order that the splendid developments of New River coking coal found on Cherry river will have adequate outlet. This will be another of the great coking-coal sections of West Virginia, and will rival any others today in active production.

The Davis Creek Railroad, below Charleston, has been purchased by strong Eastern parties, and it will be extended to Coal river. They have purchased the lands lying between Davis creek and Coal river, and will immediately develop them. Such is the case with the Elk river. The great tract of land known as the Cameron lands is being actively developed, and the timber is being taken off in immense quantities and at splendid prices. Anyone who came down the New river and the Kanawha valley years ago has but to take the same trip, and he will see the marvelous increase in the production of coal. The operations at that time have been doubled and improved, and no longer is the development of coal clinging to the river, but is permeating the creeks and the valleys, where they find the best coal.

The Chesapeake & Ohio is building its Greenbrier branch where, it is understood, it will soon reach the splendid lands of the Gauley section and will open up as fine a territory of coking coal as is tributary to the main line.

The Guyandotte road, pushing its way through the counties of Cabell and Lincoln, is developing a very rich territory, and two large operations are in process of completion along its line. Every mine in

the Southern West Virginia districts is working to its full power. Every coal operation is prospering. There is scarcely a mine operation in the district of West Virginia which is not clamoring for hands, and which is not increasing its productive capacity. The lands have gone up with immense jumps in prices, and now that they are understood to rival in quality the soft-coal production of Pennsylvania, we will look for an immense increase in value from this time on. It seems that the production has been steadily continuous, and we are informed by those negaged in coal operations that in most instances they have their production sold for one year ahead. The Campbell's Creek Coal Co. people, above Charleston, are building ten miles of new standard-gauge road in order to reach new mines in this vicinity.

The K. & M., which has not been looked upon heretofore as an important coal carrier, since its purchase by the Morgan syndicate has entered into an active development of its lake trade, and is now rapidly becoming one of the important coal-carrying roads of West Virginia. This road has its West Virginia terminus at Gauley, sixty miles above Charleston, and its lake terminus at Toledo. It is building a number of improvements and extensions, and its lake trade has had a marvelous growth.

These illustrations are given but at random. Everywhere we see increased production and new people engaged in increasing the production of this State. West Virginia is recognized as a great practically undeveloped coal-producing territory of the country. As a matter of fact, with these immense developments in this State, as soon as you leave the immediate streams and the easy valleys you will find immense sections of entirely undeveloped properties rich with the finest coals of the world. The production has been equally great in this section with reference to timber, and the prices of good timber lands have enormously increased.

The efficient and able mine inspector, J. W. Paul, informs your correspondent that this year will witness the greatest increase in the production of coal ever known in the State. The numerous developments of coal properties now going on will make West Virginia in the next year the greatest new-world factor in the production of coal, second only to Pennsylvania.

To the Point.

Editor Manufacturers' Record:

We picked you up on the 23d of February and found you brimful of good reading. You invite us to let our wants be known through you. Thanks. We are informed that some of our people want to aid a good man in putting up a furniture factory at this point. We do not know who the interested parties are. But we do know that H. H. Thompson and J. P. Tur, each for himself, wishes to purchase a saw-mill, and might be induced to take cotton gins too. They are good men. If Mr. Thompson does not put in the gin, other parties will. That is an assured fact. We will install an up-to-date brick plant, and would purchase a good second-hand boiler, not less than 65 horse-power and not more than 100 horse-power, respectively. C. D. TURNER.

Hillsboro, N. C.

H. W. Lilly of Fayetteville, N. C., is interested in a line of steamers to be operated on the Cape Fear river between Fayetteville and Wilmington. An electric railroad, it is stated, will be built from Cape Fear to the river landing in connection with the enterprise.

PAN-AMERICAN EXPOSITION.

Interesting Features of the Display at Buffalo.

Among the interesting features promised for the Pan-American Exposition at Buffalo, which opens on May 1, will be a rice mill in operation. It will be sent from Crowley, La., which is in the center of the rapidly-developing rice-growing section of the Southwest. Louisiana will be well represented, too, in the forestry exhibit. In that State there are about fifty varieties of hardwood, each of which will be represented. Some of the specimens are eight feet in diameter. Some palmetto stalks measure sixteen feet. Other exhibits are bundles of reed cane forty feet in length and two inches around, green Spanish moss and black Spanish moss. It is proposed to distribute about 6000 little blocks of wood as souvenirs. The varieties represented will include red cypress, white cypress, red oak, white oak, cow oak, water oak, striped oak, live oak, red gum, black gum, white ash, blue ash, yellow ash, lynchwood, cottonwood, sycamore, elm, mulberry, locust, persimmon, ironwood, beech, magnolia, long-leaf pine, red pine, red sassafras, water elm, walnut, pecan, cedar, prickly ash, haw, plum, willow, maple, elder, hickory and cherry. Alabama, Georgia, Kentucky, Maryland, Mississippi, Texas and other Southern States will have representation.

By arrangement with the cable companies and with the telegraph companies the executives of all the countries of the Western Hemisphere will unite in starting the machinery of the exposition on May 1, and at the same time will send a message of greeting. It is expected that Vice-President Roosevelt, Governor Odell of New York and a large number of national and diplomatic officers will participate in the dedicatory ceremonies about the middle of May. President McKinley and his Cabinet will visit the exposition early in June.

Begun Mining Operations.

Mr. Robert E. Lyon of Baltimore, one of the directors of the United States Collieries, Steel & Iron Co., is authority for the statement that the work of developing its ore property in North Carolina has begun. He states that it controls about 7000 acres in Stokes county, as well as coal fields in Eastern Kentucky. It is also stated that English investors have become interested in the company, which includes Messrs. Julian S. Carr and L. A. Carr of Durham, N. C.; Daniel Crook, Joseph H. Foss and Joseph Hazell of Baltimore. The company will have its principal offices in the Calvert Building, Baltimore.

Southern-Built Torpedo-Boats.

The torpedo-boat Tingey, being constructed at the Columbian Iron Works, Baltimore, has been successfully launched, and is to be completed as soon as possible. The boat is 175 feet in length and 17 feet beam, and is calculated to develop a speed of twenty-six knots an hour.

Arrangements are being made for the trial trips of the torpedo-boats Thornton and Shubrick, recently completed by the William R. Trigg Shipbuilding Co. of Richmond, Va. They are of the same dimensions as the Tingey.

The recent consignment of 3000 barrels of crude oil from the Texas fields for the North has reached the Standard Oil Co.'s works at Bayonne, N. J. The cargo was carried by the steamship Atlas, one of the fleet of the Standard Oil Co. The oil was loaded on shipboard at Sabine Pass.

FOREIGN TRADE.

This department is designed to set forth opportunities for the extension of the trade abroad of American manufacturers, and to record facts about the rapidly-developing commerce of the South.

Direct Trade With India.

A Madras (India) correspondent of the Manufacturers' Record writes:

"As I once suggested, there ought to be a direct steam communication with the principal ports of India and the East, as also the establishment of an American bank, if trade with India is to be carried on to any considerable extent. All European countries have regular steam service with India, and it is a surprise to me why there should be any delay in establishing a most profitable service. Certainly your States have the capital and the energy, and are second to none in wealth and knowledge. You will therefore urge your principal merchants to consider the matter over and to form a syndicate to establish a direct line and a bank if they wish their commerce to be extensive. Certainly there is a wide field to make both pay immensely, and the sooner they begin it will be better for the country. The service may include South Africa on the route, thence to Bombay, Colombo (Ceylon), Madras and Calcutta. As soon as the Transvaal war is at an end there will be enormous demands for all kinds and description of goods."

Machinery for Cuba.

The Chaparra Sugar Co., which controls about 60,000 acres of Cuban lands, is making preparations to construct mills upon its property which will have a daily capacity for grinding 3000 tons of cane. It has awarded contracts in the United States for the necessary steam-power and other equipment, and is constructing thirty miles of railroad line to connect its plantation with the Cuban system. Altogether, it is stated that about \$2,000,000 will be expended in building the sugar mill and railroad and in completing other improvements. The principal members of the company are Americans, B. H. Howell of New York being one of the principal parties interested.

Additions to Holland-American Line.

The fleet of the Holland-American Line of steamships, operating between Norfolk and European ports, will be increased by the addition of three new vessels, which will have passenger as well as freight accommodations. Their dimensions will be as follows: Length, 415 feet; beam, 52 feet; depth, 32 feet, with a cargo capacity in addition to quarters for live-stock. It is expected that the vessels will be completed in time to begin service within the next six months. The United States Shipping Co. is agent for the Holland-American Line at Norfolk and Newport News.

Exporting Bridge Material.

The American Bridge Co. announces that it has secured a contract for \$2,000,000 worth of bridge material to be used upon a railroad being built in Ecuador, South America. In addition to this contract, the same company has recently obtained an order for 8000 tons of bridge work for South Africa.

Milliken Bros., bridge builders, of Brooklyn, N. Y., have also been fortunate in securing an export order, which represents 16,000 tons of material. It is reported this will be shipped to Cuba.

New Steamship Line.

The United States consul at Antwerp is authority for the statement that a Span-

ish company has decided to begin service between New Orleans, Mexican and Cuban ports and Antwerp. It will utilize a fleet of nine vessels, the first of which will leave New Orleans about June 1. It is understood that the ships will carry passengers as well as freight. The official title of the corporation is the Olazzari Navigation Co. of Bilbao.

Notes.

Considerable sheeting has recently been loaded at Portsmouth, Va., for the Chinese trade, coming from the Carolina and Georgia mills. A single consignment received at Portsmouth consisted of 1000 bales of this quality of goods.

The Pittsburg Locomotive Works is completing an order for twenty locomotives, which will be sent abroad. An interesting feature of their construction is that the fuel supply is in a compartment attached directly to the locomotive, as well as the water tanks, no tender being required.

The Mexican-American Steamship Co. has added a third vessel to its fleet in service between Mexican ports and New Orleans. Recently one of these vessels brought to New Orleans a cargo of 14,700 bales of twine and 3600 bales of sisal. The material was shipped by rail from New Orleans to Chicago and other Northern markets.

Commerce between New Orleans and Italian ports has reached such proportions that two steamship lines have established regular schedules. The American products sent to Italy consist principally of sugar, molasses and cotton, while wines, oil, macaroni and marble are the principal imports. R. L. Arata of Memphis, Tenn., who is interested in the foreign business, states that it is increasing at such a rate that probably additional vessels will be required on both lines in the near future.

University of Tennessee.

The latest issue of the University of Tennessee Record gives the means, in the report of President Charles W. Dabney, of Dean T. W. Jordan and of other officers of the institution at Knoxville, for a comprehensive survey of its progress during the past ten or twelve years. During that time the value of the equipment of the university has increased from \$7200 to \$112,500. This does not include the buildings, and represents money saved from the current funds of the institution for the more or less permanent improvement of the various departments. The corps of professors and instructors has grown in number from fifteen to thirty-five, and the corps at the experiment station from seven to thirteen. The number of students has increased from 174 to 383. From the academic department 184 bachelors and nineteen masters have been graduated, and from the law department 106. Quite a number of gifts have been received during the past two years, including prizes from Mr. George W. Vanderbilt to be awarded for proficiency in judging dairy and beef cattle, sheep and hogs and farm crops, valuable publications, agricultural implements, etc. President Dabney suggests that there is an opportunity for men of means to make far-reaching benefactions in gifts to the university. He suggests among the needs a new academic building, a fireproof library building, a building for mining and geology, a drill hall and armory, and scholarships yielding from \$100 to \$300 a year to assist graduates and advanced students, and a loan fund to aid worthy students in their college course.

The steamship Korea of the Pacific Mail Steamship Co. was launched at Newport News on Saturday.

RAILROADS.

[A complete record of all new railroad building in the South will be found in the Construction Department.]

Through Arkansas Zinc Beds.

A new railroad to traverse the zinc-producing section in the northern part of Arkansas is being promoted by the Morning Star Railroad Co. Among the parties interested in it is Mr. George H. Heaford, formerly connected with the Chicago & Northwestern Railway Co. It is expected that the construction of the line will begin before June 1. It is intended to be built between Rush and Newport, connecting at the latter town with a line of steamers and barges to be operated on the White river. It will also form connection with the St. Louis, Iron Mountain & Southern system at Newport. Chicago and New York capitalists are reported as interested in the project.

To Extend to Shreveport.

Negotiations have been completed by which the Texas & Pacific system absorbs another railroad in the Southwest, the Natchitoches & Red River Valley. This road extends from Natchitoches to Cypress, La., a distance of about eleven miles. It has been operated in the past by an independent company. It is understood that the purchase was made in order to complete a line between Natchitoches and Shreveport, and that surveys have already been made from the terminus of the completed mileage to Shreveport. The entire distance is estimated at seventy-five miles.

A North Georgia Project.

In a letter to the Manufacturers' Record a correspondent at Dalton, Ga., writes that the Dalton & Alaculsa Railroad Co., recently organized, proposes building between Dalton and Blue Ridge, Ga., a distance of fifty-six miles. The company is capitalized at \$300,000, and includes Messrs. T. R. Jones, W. C. Martin and W. M. Jones of Dalton, Ga.; W. C. Squires of Lestershire, N. Y., and C. A. Wilkinson of Binghamton, N. Y. It is stated that the company has considerable capital back of it, and intends carrying out the project in the near future.

Illinois Central Yards.

The Illinois Central Railway yards at Harahan, La., near New Orleans, have been completed and opened for operation. They are among the most extensive in the country, representing thirty-seven miles of track, which will be increased during the present year to about fifty miles. A roundhouse to accommodate twenty locomotives, a coaling plant with a capacity of 5000 tons, also a water supply and a hotel for railroad employes, are located at the yards. The total cost of the improvements was \$300,000.

Possible Route to New York.

The Queen Anne's Railroad Co. of Baltimore has awarded a contract for its steamboat pier at Love Point, Md., to the Sanford & Brooks Co. of Baltimore, which will also construct the pier at the seaboard terminus, Lewes, Del. President William H. Bosley of the company is planning a steamer service from Lewes to New York, touching at Cape May, Atlantic City and Long Branch. The line, if established, will be operated in connection with the railroad.

Baton Rouge to Mobile.

In a letter to the Manufacturers' Record Mayor Robert A. Hart of Baton Rouge, La., who is promoting a railroad

line between that city and Mobile, Ala., writes that surveys have been made and part of the right of way secured. The promoters are desirous of enlisting the interest of outside capitalists if possible. The city of Baton Rouge is considering a bonus of \$50,000 for the project, and an election has been authorized to decide upon a tax for this purpose.

Jackson, Columbus & Northeastern.

According to a dispatch from Jackson, Miss., the Jackson, Columbus & Northeastern project is now in the hands of a company of which I. C. Enochs of Jackson is president; T. W. Brame, vice-president; W. L. Anderson, treasurer, and W. S. Wilson, secretary. It is proposed to build the road from Jackson through Central and Northern Mississippi to the Birmingham district in Alabama, and surveys were completed for the purpose some time ago.

Texas & Pacific Report.

The annual report of the Texas & Pacific Railway Co., recently made public, is a strong indication of the business prosperity in Texas and the Southwest generally. The gross earnings were the largest in the history of the company, showing an increase of \$1,451,000, compared with an increase of \$294,000 during the previous year. The surplus increased \$275,000, and is now equal to a dividend of 3 per cent. on the capital stock.

New South Carolina Line.

The Chesterfield & Lancaster Railroad, which has been under construction between Chesterfield, S. C., and a connection with the Seaboard Air Line, has been opened for operation. The road is eleven miles long, and will be a feeder of the Seaboard Air Line. It is being operated by a company of which D. J. Redfearn is president. It may be extended to Cheraw, S. C., a total distance of sixty miles.

May Be Consolidated.

A dispatch from Atlanta, Ga., is to the effect that the Atlanta Railway & Power Co., the Atlanta Rapid Transit Co. and the Georgia Electric Light Co. may be consolidated. The railroad companies control practically all of the electric mileage in the city and suburbs, and have franchises for lighting portions of the city. Securities of the railway companies are largely held by Baltimore people.

To Build New Depots.

The Central of Georgia Railway Co. is preparing to erect a number of new depots at different points along its line. Mr. John M. Egan, president of the company, writes the Manufacturers' Record that they will probably be built at Monticello and Madison, Ga., as well as at nine stations on the Bruton & Pineora branch. The company has also decided to erect an elaborate union station at Columbus.

Terminals at Portsmouth.

A dispatch from Portsmouth, Va., states that property has recently been purchased in that city which will be used by the Southern Railway Co. for terminals. It is what is known as the Emerson property, and includes a considerable frontage on the harbor. In connection with the report it is stated that the company will build several warehouses, also piers.

Coal for Railroads.

Recent orders for fuel from Southern railroads included 40,000 tons for the Louisville & Nashville and 60,000 tons for the Texas & Pacific, to be delivered at

New Orleans. It is stated that the demand for the present year will aggregate fully 400,000 tons to be supplied railroads at New Orleans, 250,000 tons at Mobile and 200,000 tons at Pensacola.

For Ocean Steamship Co.

The Ocean Steamship Co. has let a contract to the Roach Shipbuilding Co. of Chester, Pa., for the vessel which is to be added to its fleet. She will be 375 feet in length, and provided with accommodations for passengers as well as freight. She will be placed in service on the route between Savannah and New York.

President of Mobile & Ohio.

The directors of the Mobile & Ohio Railroad Co. have elected Mr. Samuel Spencer, president of the Southern Railway, president. Mr. Spencer and Vice-Presidents Andrews and Finley of the Southern have been added to the directory of the Mobile & Ohio.

Railroad Notes.

Robert H. Connell of St. Louis, Mo., writes to the Manufacturers' Record that he and others have purchased the street-railway system of Paris, Texas, and have decided to change it into an electric system.

Mr. W. L. Glessner of the industrial department of the Georgia Southern & Florida Railway has recently issued a list of the principal business houses and stations on its line, with a brief description of each town and its prospects as an industrial center.

Commemorating the fiftieth anniversary of its organization, the Illinois Central Railroad Co. has distributed about 30,000 medals among its employees, stockholders and others. Every employee who has been in service one year or more receives a medal.

The Augusta Union Station Co. has been organized at Augusta, Ga., with the view of building a union depot and a short railroad line in the city. The company is capitalized at \$75,000, and includes Joseph B. Cummings, also General Manager Thomas K. Scott of the Georgia Railroad Co. The idea is to construct a depot which will be used by all the lines reaching Augusta.

The Transactions of 1900 of the Engineering Association of the South have been published in pamphlet form. Among the papers included in the publication are: "Painting Railroad Bridges," by Hunter McDonald; "Approaches to the Viaducts," by William M. Leftwich, Jr.; "Nienragua and Panama Canal Routes," by E. C. Lewis; "Gas Engines and the Economy of Gasoline for Small Power," by John Wilkes; "The Traverse Table on Preliminary Surveys," by Robert L. Lund; "The American Phosphate Co.'s Plant near Mt. Pleasant, Tenn.," by Geo. F. Blackie; "The Guayaquil & Quito Railway," by John Y. Bayliss; "Grain Elevator at Hickman, Ky.," by C. B. Wilson; "The Cost of Power," by C. S. Brown; annual address of the president of the association, James Geddes; annual report of the secretary, Howard M. Jones.

The position which the Pierpont Morgan organization holds with reference to the business and political world is discussed by Mr. John Briben Walker in the April Cosmopolitan under the title, "The World's Greatest Revolution." Familiar with the business world and a student of affairs, Mr. Walker has, while approving of the general idea of concentration which makes for good organization and public economy, drawn a picture of the power now exercised.

TEXTILES.

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the Manufacturers' Record. We shall be glad to have such matter at all times, and also to have any general discussion relating to cotton matters.

The Cotton Movement.

In his report for March 22 Secretary Henry G. Hester of the New Orleans Cotton Exchange shows that the amount of cotton brought into sight during the 203 days of the present season was 8,740,516 bales, an increase over the same period last year of 576,832 bales; the exports were 4,808,557 bales, an increase of 308,133; takings by Northern spinners 1,633,414 bales, a decrease of 411,358; by Southern spinners 990,956 bales, a decrease of 31,754.

Textile Notes.

The Mascot Knitting Mills, Sweetwater, Tenn., contemplates increasing its capacity.

It is said that a towel and handkerchief mill will probably be established at Claude, Texas, by Emil Reck.

H. W. Thurston of Saddle River, N. J., is reported as contemplating the removal of his knitting mill to Macon, Ga.

Efforts are being made at Winston-Salem, N. C., for the organization of a \$100,000 company for the establishment of a co-operative cotton mill.

The Pittsburg Textile Manufacturing Co., Pittsburg Texas, is in the market for ten sewing machines and full equipment for the manufacture of pants.

The Madison County Milling Co., Huntsville, Ala., has awarded contract for erection of its building to the Fulcher Construction Co. of Nashville, Tenn.

W. L. Wilhoite and others will establish a hosiery knitting mill of \$25,000 capital at Shelbyville, Tenn., and are negotiating for machinery and fixtures.

The Worth Manufacturing Co. of Worthville, N. C., has purchased the Engelworth Mills, as reported lately, and will in the near future operate it as Mill No. 3.

The Nantucket Mills of Spray, N. C., has increased its capital stock from \$125,000 to \$225,000 for the purpose of enlarging its mill. B. Frank Mebane is president.

The Cliffside Mills, recently incorporated at Rutherfordton, N. C., with capital stock of \$80,000, has its mill in course of construction at Scruggs, or Lovelace Shoals, on Second Broad river, and will manufacture cotton, wool and flax into thread and cloth, etc. Among those interested are T. B. Lovelace, R. R. Haynes, Henry Jenkins and others.

It has been mentioned that Sidney F. Story, vice-president of the Southern Industrial Association, New Orleans, La., has been investigating with a view to purchasing the machinery of the Galveston (Texas) Cotton Mills. Mr. Story represents a number of New Orleans capitalists, who have subscribed \$100,000 for the erection and operation of a cotton mill.

The organization of a company to build the cotton mill recently reported has been completed, with capital stock of \$125,000, which will be increased to \$150,000 if needed. Site of thirty acres has been purchased at Paris, Texas, and company has definitely determined to erect its

buildings for both spinning and weaving, but has not as yet determined whether it will install looms at the start. H. H. Kirkpatrick is among those interested.

The Lenoir Cotton Mill of Lenoir, N. C., has been organized, with capital stock of \$75,000, for the establishment of a 3000-spindle mill, which will be increased to 6000 spindles later on. Company will use long-staple cotton exclusively and spin fine yards. M. M. Courtney is president; G. W. F. Harper, vice-president; J. D. Moore of Gastonia, N. C., secretary and treasurer, and J. O. White, superintendent. J. D. Moore has charge of purchasing machinery.

The Mayfield Woolen Mills, which recently purchased the old Kentucky Woolen Mills at Louisville, states that it will operate the plant for the present, until buildings which are now being erected in St. Louis are completed, when the machinery from this mill and from the company's Mayfield (Ky.) mills will be removed to St. Louis. Company will also build and operate a large clothing factory in connection with these mills. Capital stock and surplus now amounts to \$600,000, which will be increased to \$1,200,000. When all improvements and arrangements have been completed the company will have a 16-set mill, and will employ about 2000 hands in the two mills and the clothing factory; J. D. Simpson, secretary.

Among the clearances last week from Jacksonville, Fla., were the following: Schooners F. W. Pendleton with 330,000 feet of lumber and Thomas W. Winsmore with 334,000 feet for New York; the schooner Lizzie Babcock for Philadelphia with 9500 crossties and the schooner Charles C. Endicott for Elizabethport, N. J., with 13,000 crossties. The schooner Roberts and Russell cleared for Hope Town, British West Indies, with a cargo of 45,000 feet of lumber, 480 bundles of shingles and other freight. The steamers of the Clyde Line all left with part cargoes of lumber; steamship Comanche for New York took out 325,000 feet of lumber and 7000 bundles of shingles; steamship Iroquois 250,000 feet of lumber, and steamship Navahoe for Boston with 200,000 feet of lumber, 50 packages of doors and 2000 bundles of shingles.

Receipts of lumber at St. Louis for March have been the heaviest on record, exceeding those of the corresponding period last year by nearly 20 per cent., and from present indications the receipts for the remainder of the month will show an even greater increase. Receipts by river and rail have increased from 695,000,000 feet in 1894 to 1,336,403,254 feet in 1900. The receipts last year were 198,279,254 feet more than in 1899. The shipments have increased from 365,000,000 feet in 1894 to 735,442,000 feet in 1900, and the consumption of lumber at this point has increased from 328,000,000 feet in 1894 to 600,961,254 in 1900.

Scribner's Magazine for April will be a spring number, with a special cover in colors and illustrations in color by a new method. It will contain six short stories—articles by John Fox, Jr., Walter A. Wyckoff, Mrs. Gilbert and others—and the pictures will represent the best work of such artists as Peixotto, Steele, Christy, Weeks and McCarter.

The business men of Paris, Ky., have organized a commercial club, with R. J. Neely, president; Henry Power, vice-president; Frank Walker, secretary, and C. D. Parrish, treasurer. The club will try to make certain the proposed electric railroad between Paris, Sharpsburg and other towns.

LUMBER.

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

LUMBER MARKET REVIEWS.

Baltimore.

Office Manufacturers' Record, Baltimore, Md., March 27.

The volume of trade in lumber during the past week has not shown any expansion, and the market is rather quiet for this period of the season. There is, however, a moderate trade in progress, and later on it is expected that more activity in the various channels of this industry will prevail. The movement in North Carolina pine has been of fair proportions, and the market is steady as to values, with stocks ample for present requirements. The demand for lumber from both yardmen and boxmakers is limited. In air-dried lumber values for certain grades are a shade easier. The white-pine trade is good, with considerable stock moving. The hardwood trade is in better shape, and the market fairly active. There has been a good inquiry during the week from woodworking establishments in nearby towns. Oak, ash and poplar are all firm, and for dry stock prices are said to be a shade higher. Stocks of seasoned lumber are scarce, while green stocks are quite large. The foreign export trade in hardwoods is quiet, with transactions limited in character.

Savannah.

[From our own Correspondent.]

Savannah, Ga., March 25.

The movement at this port during the past week in nearly every line of the lumber industry shows more expansion and the volume of business much improved. Over 3,000,000 feet of lumber left the port during the week, and from the number of charters recently closed indications point to larger shipments during April. There is a good demand from Northern and Eastern centers, and with milder weather in those sections for building operations considerable lumber will likely go forward during the next sixty days. From all milling sections in Southern Georgia stocks are reported light, and mills are generally running on full time. As to prices, they are generally about steady. Sawn ties are quoted \$8 per 1000 feet; hewn ties, 7x9x8½, 25 cents each; minimum easy size yard stock, \$10 to \$10.50; car sills, \$12; stock 14x16 inch, depending on length, \$13 to \$15, and ship stock, \$16. Reports from nearby ports are very encouraging. Business at Brunswick is active in nearly all lines of the lumber trade, while shipments of lumber and crossties are above the average for this period of the season. Foreign shipments for March to date amount to over 5,000,000 feet, while the coastwise trade in crossties is quite active. There is also a good business reported at Darien. There is a better foreign demand, and also considerable domestic trade. Receipts of lumber and timber for the week have been moderate. Freight rates on lumber and other wood products are steady. Recent charters for lumber were closed as follows: Savannah to New York, \$4.50; Savannah to Portland, Maine, \$5.50; Brunswick to New York, \$4.75.

Mobile.

[From our own Correspondent.]

Mobile, Ala., March 25.

While the volume of business shows but little expansion in the several departments of the timber and lumber industry, there is a steady demand, and indications point to a revival in the timber trade during the next sixty days. Prices are slightly

improved, with sawn timber in the open market quoted at 10½ to 11½ cents per cubic foot, and hewn timber 13 to 14 cents per cubic foot. Stocks of timber are generally light, and the vessels due to load during the next sixty days will reduce stocks very considerably. Hewn oak is in limited demand at 15 to 18 cents per cubic foot, and poplar at 13 to 13½ cents per cubic foot. The lumber trade is in satisfactory shape, with a good general demand. Cuba is buying quite freely, with some demand from South America and also some business with Eastern coastwise ports. During the past week the following shipments were reported: Schooner Kenny for St. John, N. B., 14,657 cubic feet of sawn timber and 6772 cubic feet of hewn timber; bark Regulus for Varel Roods, Germany, 24,252 cubic feet of sawn timber, 1028 cubic feet of hewn timber and 44,571 feet of lumber. Cuban shipments for the week were over 500,000 feet of lumber, and for Boston two cargoes, aggregating 1,275,653 feet, were shipped. The total shipments of lumber for the season amounts to 59,152,581 feet against 84,637,062 feet. The freight market is reported easier, vessels offering at 96/ to 102/6. The Dutch steamer Gamma was chartered last week to load timber at a Gulf port to east coast of England at 102/6, April-May; a bark, 903 tons, Ship Island to Rosario with lumber at \$15.25; bark Bruce Hawkins, 546 tons, Apalachicola to Boston with dry cypress at \$6, and ship Favorite, 895 tons, Pensacola to Buenos Ayres with lumber at \$14. The steamer Katendrecht was chartered to load at a Gulf port with timber for Rotterdam at 101/3, March.

Memphis.

[From our own Correspondent.]
Memphis, Tenn., March 25.

There has been greater activity among the lumber mills of Memphis this week than at any time since the beginning of the current season, most of the mills shut down heretofore having resumed operations with the return of a better volume of business and a larger supply of logs. The rivers are now in much better shape than they have been for weeks. It is estimated that practically all the mills are now running. There has been really no increase over the previous week in the volume of actual business, though the lumbermen are very much encouraged by the larger number of inquiries coming forward, both from the export and domestic trade, which promise to develop active business in a short time. This is really the most encouraging feature of the situation. There is some hardwood lumber now going forward to both the continental and English trade, while there are also shipments to South Africa and South and Central America, though the situation in South Africa is such as to give little encouragement for the immediate future on account of the check put to building operations by the Boer war. Still the trade here is confident that there will be natural reaction in a short time from the lethargy of the foreign markets in that country as well as elsewhere. As to the domestic trade, this has furnished the best line of inquiries, and with the better weather North, which is now promised, there is expected to be quite a revival of business activity. As to the price position there is nothing new to chronicle, the market ruling firm on all firsts and seconds, with commons and culls in fair call, with prices steady at previous figures. The hardwood men, as a rule, are looking forward to an increase in prices as soon as the demand becomes slightly more pressing, as the stock of firsts and seconds here is not at all excessive. As to the local demand for lumber, the dealers report a good business, with prices

ruling firm in all lines. Preparations are now making for the building of the headquarters for the Confederate Reunion to be held in May, and this promises a large volume of orders. The amount of building now in progress is unprecedented, the building permits this month being larger than for the corresponding period at any time in the history of the city. All the various grades of pine and other soft woods are held in good quantities, with little scarcity reported in any direction.

Beaumont.

[From our own Correspondent.]

Beaumont, Texas, March 23.

In our last report on Texas conditions we referred to a temporary lull there was in the demand. This has entirely passed away, much to the surprise of the manufacturers. The demand for the past two weeks has been abnormal, and it would seem as if the entire State was in a competitive contest to see which part thereof could use the most lumber. Salesmen who are out in the territory have been sending in a large number of orders. One noticeable feature is that the majority of the orders call for a high class of lumber, thus indicating that most of the building is being done in the cities, which is logical, since the farmers are busy in the field. Stocks on hand in the long-leaf district March 1 were, in round figures, 145,000,000 feet, a reduction of over 13,000,000 feet as compared with stock on February 1. It is contrary to the usual custom for stocks to decrease at this season of the year, and the alarming decreases each month can only tend to abnormal prices in the lumber market, such as now exist with regard to shingles. The latter item has advanced within the past five or six months nearly 85 per cent. The unusual conditions with respect to the timber department continue. Not before in the memory of the oldest lumberman have there been so many enquiries on the market and so many orders placed for bill stuff as has been the case the last few weeks. The Western States continue to be heavy buyers of Texas yellow pine in piece stuff. Orders are being received daily from the salesmen covering that territory, and, most significant of all, the large operators in yellow pine at Kansas City, St. Louis, Chicago, are sending representatives to the Texas and Louisiana mills to purchase lumber for future delivery. The conditions in the crosstie market are booming. The latter word expresses the situation exactly. I venture the assertion there is not one long-leaf yellow-pine mill in Texas or Louisiana able to deliver 10,000 heart ties within the next two months, in addition to their present contracts. There are scarcely any that could deliver such a comparatively small number in four to six months. The price no longer enters into the situation; the ties in the heart grade cannot be obtained. The consequence is that several large enquiries recently on the market for heart ties have been asked for in square edge and sound, the next lower grade. In this grade the mills can furnish a considerable number. Heart ties were last sold at \$11; it is doubtful if they could be purchased today for \$12. Square edge and sound are quoted at \$7.50. The price of 45 shillings per load for square sawn timber at Liverpool is too low to permit of Texas and Louisiana mills profitably cutting this class of stock, and no sales are being effected in this item except for such stock as is on hand. From Beaumont stocks the past week a sale of 150,000 feet was made for Hamburg. The demand for German prime is strong, while for kiln-dried saps the call is unabated. Of the latter, however, there are not great stocks. Consequently, shipments via the export gateways have

been light the past three weeks, except such stock as has been sent to Mexico. From the latter country there is a big demand for railroad and mining timber, which is being largely supplied from this market. The shingle famine in Texas continues, and grave fears are entertained by the thoughtful manufacturers that the redwood and red cedar shingles of California and Washington will secure such a foothold in Texas as to seriously affect the future of the cypress shingle. There is considerable food for reflection in this statement for the manufacturers of cypress shingles, who are inclined to be rather outrageous in their ideas of prices.

Lumber Notes.

Kennedy & Co., a timber and logging concern domiciled at Wiggins, Harrison county, Mississippi, has been incorporated, with a capital stock of \$30,000.

Receipts of lumber at New Orleans for the week ending March 22 amounted to 2,305,000 feet, and for the season to 77,422,000 feet, against 61,608,274 feet last season.

The J. A. Favre Lumber Co. of Pearl-ington, Hancock county, Mississippi, has been chartered, with a capital stock of \$100,000, with the privilege of increasing it to \$200,000.

Davis & Lemon's saw and planing mills at Kenova, W. Va., were destroyed by fire on the 19th inst. The lumber in the yards was a total loss. The loss is estimated at \$50,000, with no insurance.

Mississippi wholesale lumber dealers report a flattering outlook for business this year. The demand for lumber, both domestic and export trade, is unusually strong, and the stock on hand light compared with previous years.

Frank Kendall's planing mill and a large quantity of dressed lumber at Kendall's, six miles south of Pine Bluff, Ark., were destroyed by fire last week. The loss on mill and fixtures will aggregate \$12,000 and on lumber \$3000; no insurance.

The Warrenton Furniture Co. of Warrenton, N. C., has been chartered, with a capital stock of \$10,000, to manufacture furniture, bed springs and mattresses. The incorporators are W. B. Boyd, R. B. Boyd, Mrs. A. V. Fleming, F. P. Hunter and others.

The W. W. Ritter Lumber Co. of Welch, W. Va., has been chartered, with a capital of \$1000. The incorporators are W. M. Ritter, R. E. Pendleton, Columbus, Ohio; Isaac T. Mann, Bramwell; James T. Hamill, Welch; Edwin Mann, Bluefield, W. Va.

It is stated that the Holly River Lumber Co. has let the contract for the continuance of a railroad from Holly river to Addison, Webster county, West Virginia. The Holly River Company has extensive saw and planing mills, and the road extension will place it into a virgin forest and give another outlet for its products.

Mr. W. W. Mills, an extensive lumber dealer of Carthage, N. C., has sold his interest in the business at Carthage, including the planing mills and other contracts on the Carthage Railroad, for \$35,000 to J. W. Jackson, E. M. Tally and W. H. Webster, who will organize a company to be known as the Carolina Lumber & Manufacturing Co.

Mr. M. V. Richards, land and industrial agent of the Southern Railway, and a party of Northern capitalists visited Meridian, Miss., last week to inspect the lumber resources of that section with a view to securing hard timber land. The party included P. W. Smith, Richmond, Ind.; Jacob Cotlett, Fort Wayne, Ind., and J. B. Mason, Decatur, Ind.

The Virginia Box & Lumber Co. of Norfolk, Va., was incorporated last week, with a capital stock of \$25,000. The company will manufacture boxes and conduct a general lumber business. The officers of the company are R. B. Cooke of Norfolk, president; A. H. Flint of Providence, R. I., vice-president, and H. M. Kerr of Norfolk, secretary and treasurer.

The extensive lumber plant of John V. Ransom of Nashville, Tenn., together with 6,000,000 or 7,000,000 feet of lumber, was destroyed by fire last week. The entire plant covered an area of about twenty acres, and was entirely wiped out by the conflagration. Mr. Ransom estimated his loss at about \$140,000. The buildings were insured for \$20,000 and the lumber for \$95,000.

There is said to be unusual activity with a strong demand for lumber and building material at Pratt City, Ala. The Pratt City Lumber Co., successor to the Krebs Lumber Co., is enlarging its lumber-yard at Pratt City, and will erect several frame structures. The Moore & Propst lumber-yards, as well as all others engaged in the lumber trade, are enjoying an active trade.

J. F. Jordan of Greensboro, N. C., has closed a deal for the sale of 20,035 acres of land in Cumberland and Harnett counties, owned by the Consolidated Lumber Co. of Philadelphia, to William Johnston of Liverpool, England, president of the Johnston Line of steamers. The land is situated in the celebrated long-leaf pine region of North Carolina. Mr. Johnston will improve and develop the property.

The North Georgia Milling & Mining Co. of Atlanta, Ga., was incorporated last week, with a capital stock of \$2,500,000. The incorporators are J. K. Tillotson of New York; A. M. Gamman of Corning, N. Y., and Spencer R. Atkinson and A. J. Orme of Atlanta. The company owns 30,000 acres of land in Murray, Gillman and Fannin counties, upon which the company proposes to develop the ore and timber.

It is stated that the La Follette Coal, Iron & Railway Co. of Knoxville, Tenn., has three first-class saw-mills running full time, and a fourth will be added shortly. The mills are scattered over the finely-timbered tract of land owned by the company, and large quantities of first-class lumber are being stacked in the company's yards. Arrangements are being made to place about 1,500,000 feet of first-class lumber on the market.

Employees of the Red Cypress Lumber Co., while at work cutting timber in Dougherty county, Georgia, several weeks ago, discovered a giant sycamore tree of great proportions. A foot from the ground its trunk is forty-four feet in circumference. For twenty feet above ground the body of the great tree is round and symmetrical, but at that point it branches into four sections, any one of which would make a giant tree if standing alone.

The Raine-Andrews Lumber Co. of Empire, Pa., in a letter to the Manufacturers' Record states that it has 10,000 acres of timber lands in Randolph county, West Virginia, that it will develop at once. The company will construct on the Gladys fork of the Cheat river some twenty-five miles of standard-gauge railroad, and along this route at a convenient point will operate a modern single band and band resaw mill with capacity to cut about 20,000,000 feet a year of hemlock, spruce and hardwoods. Operations will be commenced on April 1, and the plant will be ready for operation in the early fall. The principal office and headquarters of the company will be located at Elkins, W. Va.

MECHANICAL.

Hammond Water-Tube Boiler.

An examination of the accompanying illustrations will give an idea of the

be absorbed while gases are passing around the tubes, and therefore more water evaporates per pound of coal.

The claim is made that this is the only water-tube boiler connected to the steam drum at one end only, allowing the steam

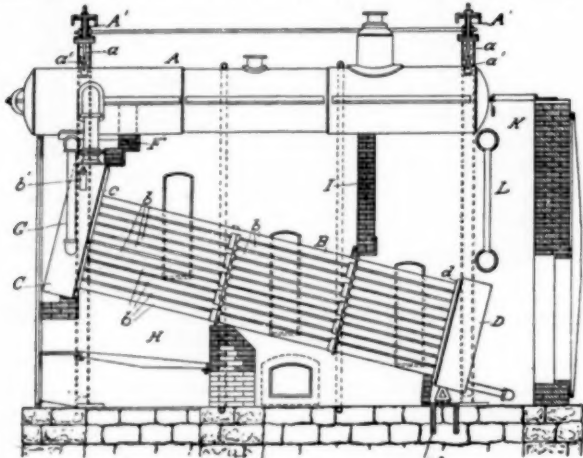


FIG. 1—HAMMOND WATER-TUBE BOILER.

many improvements represented in the Hammond water-tube boiler, recently placed on the market by the Hammond Iron Works of Warren, Pa.

Among the advantages claimed for this boiler is a rapid circulation. As it is

drum to expand independently of the tube section. As the tube section is on rollers and expanding independently of the steam drum, there is a perfect freedom of movement for all parts, consequently no strains and no joints to leak.

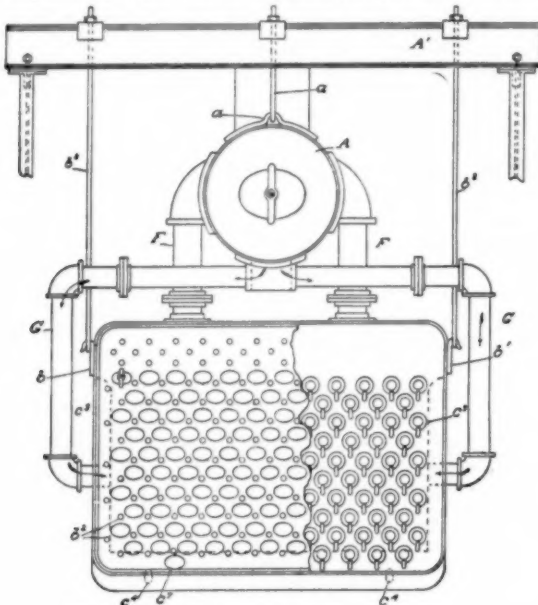


FIG. 2—HAMMOND WATER-TUBE BOILER.

built with a tube within a tube, there is only a small amount of water exposed to the heating surface, therefore it heats quickly and creates a circulation between the outer and inner tube which is very rapid. All parts can be easily removed and replaced; all parts are interchangeable, and the boiler can be readily cleaned. It is especially suited for export, as there are only four joints to take apart and the boiler is ready for shipment. Each boiler can be tested at the works complete, and as there are in the boiler proper only two parts, and only four joints to be made at its destination, it does not require the services of an expert to set it up.

This boiler will keep clean for a long period, as the feed entering in the top of the steam drum at the back travels the length of the drum, thence down pipes on the sides and enters the box on the front of the diaphragm plate, thence down center tube to rear box. The circulation is slower at this point than any other part of the boiler, thus giving the sediment time to settle, which can be drawn out through the blow-off. It is a great economizer of fuel, for the greater the circulation in any boiler the more heat units can

Gang Edging Machine.

This machine, manufactured by the H. B. Smith Machine Co. of Smithville, N. J., is designed for edging boards in saw-mills, sawing planks or boards from

chain to connect the feed rolls, instead of the necessarily short belts which are very commonly used, each feed roll moves in unison with its neighbor, and therefore

shoes take the thrust of the saws on the lumber, and prevent all ducking or trembling of the lumber after having left the feed. They can be quickly dropped out

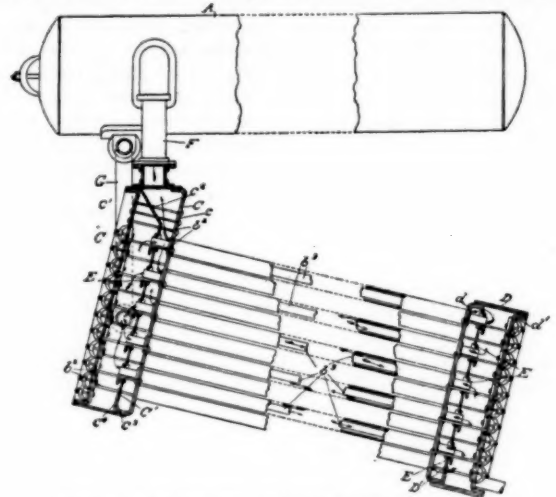


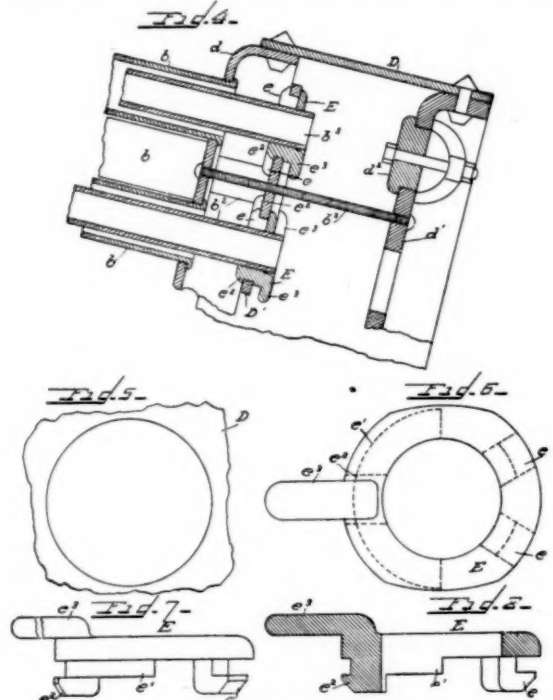
FIG. 3—HAMMOND WATER-TUBE BOILER.

secures a more uniform and positive feed than is possible otherwise.

The saw arbor is made of fine steel, is large and heavy, double keyseated, and

of the way when removing or replacing the saws.

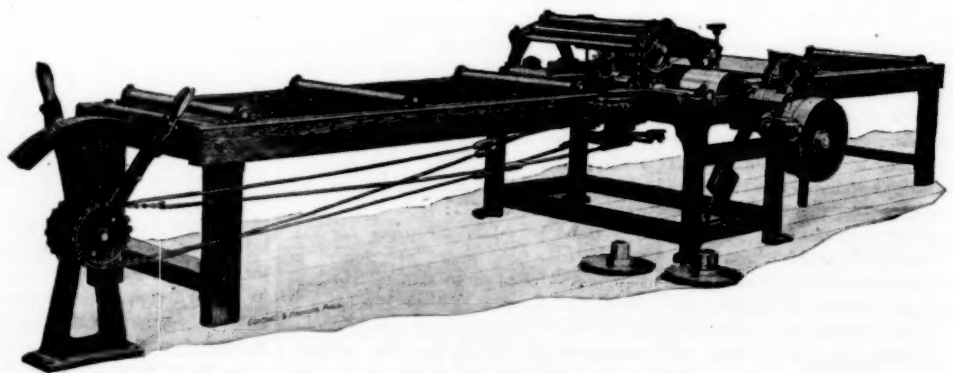
Four 14-inch saws, with two adjustable and two stationary collars,



HAMMOND WATER-TUBE BOILER.

revolves in three long bearings. It carries one or two fixed and one adjustable saw. A sliding box is fitted at the end of this arbor, which can be swung out of

are furnished with each machine, thus allowing the operator to keep a set of sharp saws on hand. Owing to these provisions, the changing of



GANG EDGING MACHINE.

the circular, gang or muley into joists, scantling, flooring, etc. It is a positive feeder, having all feed rolls driven, and is capable of ripping from 100,000 to 125,000 lineal feet per day of ten hours. By using the company's patent steel-link

the way with the utmost ease without removing a single bolt (simply lifting a pin), and the saw is instantly removed. A decided innovation is the placing of two small shoes at the cutting edge of the saws, over which the stock passes. These

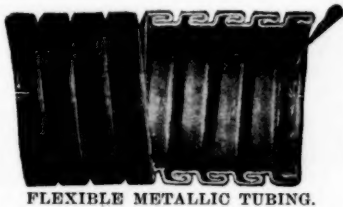
saws does not involve a loss of time. The gauge and adjustable saw are controlled by the setting levers shown at the infedding end, and can be adjusted to the fraction of an inch. Large raised figures and graduation marks are cast on the

index plates of these levers, which can be easily and quickly read in making adjustments. Size A 11 will feed stock up to 27 inches wide and 4½ inches thick. A 13 will feed stock up to 31 inches wide and 4½ inches thick. The arbors of both these sizes are driven by 9x9-inch pulleys, and should run 2800 revolutions per minute. The saws used are 14 inches in diameter, 11 gauge, 24 teeth, 2 13-16 bore, with a ¾-inch pin hole 1 11-16 inches from center of saw to center of pin hole. The illustration shows a right-hand machine, but the company builds both rights or lefts as ordered.

The De Loach "Paragon" Planer.

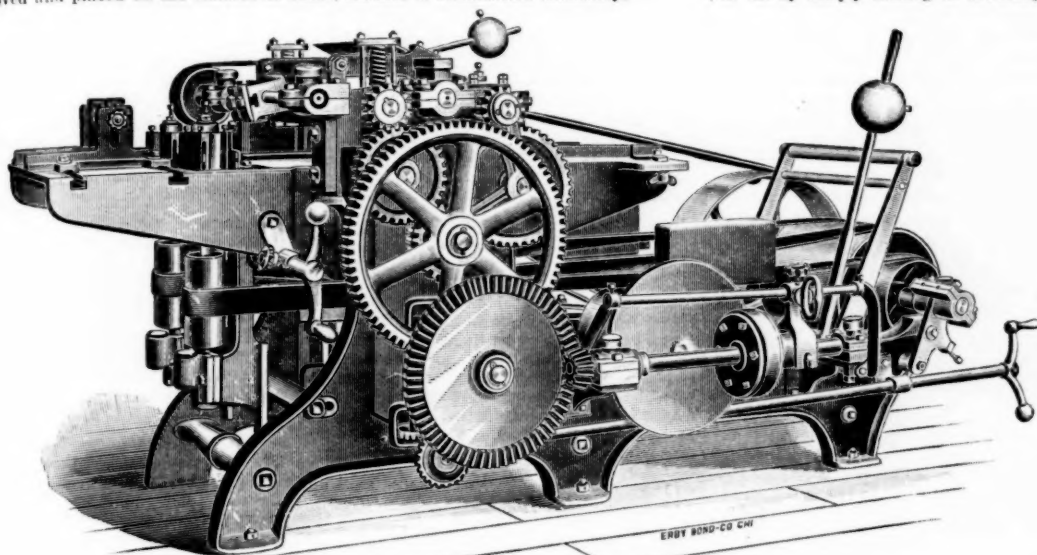
The accompanying illustration represents the "Paragon" planer, with matching and molding attachments, as improved and placed on the market in 1899

is rolled in the form of a spiral, so that the edges overlap and fit into each other tightly without interfering with their power of motion. As the tape is rolled it forms a groove for the reception of a



FLEXIBLE METALLIC TUBING.

packing, which is completely enclosed in the metal as it rolls, where it remains fully protected from internal or external wear and tear. The packing makes the tubing perfectly tight, while the jointing induces a remarkable flexibility.



THE "PARAGON" PLANER, MATCHER AND MOULDER.

by the De Loach Mill Manufacturing Co., Atlanta, Ga.

The variable friction feed is the most important feature of this machine, and its arrangement is very condensed, substantial and convenient. By its use the operator can speed the feed rolls as desired, from very slow on heavy cuts to extremely fast on light cuts. Most of the work done on an ordinary planer is narrow and light, and the value of the variable feed cannot be estimated except by those who have seen its wonderful advantages. The actual capacity on this class of work is about double what it would be on an ordinary machine. The feed is also reversible, and boards can be backed out if for any reason it becomes desirable to do so, and this can be done without stopping the machine. The ease with which the variable friction drives the rolls through the heavy chain of gears will be apparent by observing that only such pressure as the ball weight brings to bear is necessary to cause the working contact between friction and disc.

The machine dresses 20 inches wide, 6 inches thick; matches ½ inch to 2 inches thick and 12 inches wide; weight, 2500 pounds.

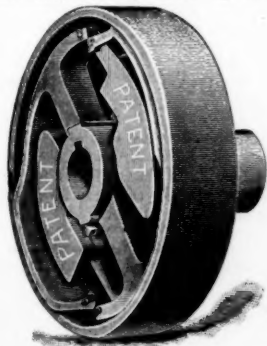
Flexible Metallic Tubing.

Flexible metallic tubing constitutes a reliable and practically indestructible substitute for rubber hose. On account of its construction and the material employed, it is impervious to the influence of frost, heat, steam, petroleum, oils, benzine, lyes, etc., and is also excellently adapted for the conveyance of air, gases and water. This important invention is constructed from a metallic tape of such material and shape as to meet the requirements of the particular purpose for which the tubing is to be used. The tape

Messrs. Walter L. Flower & Co., 1611 Chemical Building, St. Louis, make a specialty of this tubing, and will be pleased to give further information.

Blakeslee Patent Friction Clutch.

We illustrate in this connection the Blakeslee patent friction clutch, a device which is used on and constitutes a feature of the controlling mechanism of the Blakeslee gas and gasoline engine. It is automatic in the true sense of the word, and its advantages are many. The engine is turned over without any load on it, and when at about half-speed the clutch automatically takes up the load



BLAKESLEE PAT. FRICTION CLUTCH.

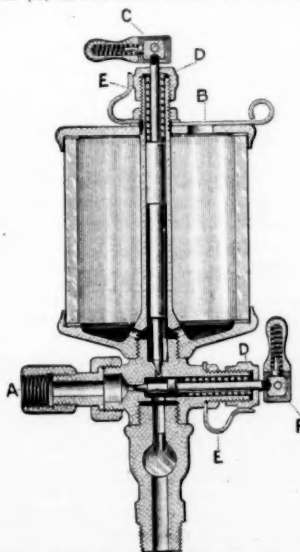
without any attention, shifting of belts or levers. When the engine is shut down, as the speed falls the load is released and everything is in readiness to start the next time. This clutch is equally applicable whether the engine be belted or direct-connected, and is neat, compact, powerful and positive, doing away entirely with tight and loose and wide-faced pulleys. The manufacturer of this engine, the Blakeslee Manufacturing Co., Birmingham, Ala., will be pleased to send

gratis to anyone a copy of its new illustrated catalogue describing this clutch and its line of stationary and portable gas and gasoline engines.

Lunkenheimer Pressure Oil Cup.

The Lunkenheimer pressure oil cup, herewith illustrated, contains a number of improvements which will be appreciated by engineers and machinists generally. With this cup it is always easy to regulate the supply of oil under pressure, and when it is desirable to cut off same the valve (F) can be turned down and will act as an indicator, showing from a distance that the supply is shut off. The regulation of this valve is very simple and easily effected, and when once set is not disturbed by the jarring of the machinery. The feed can be turned on or off by simply raising or lowering the

cam lever (F). The sight feed in the base is large, and the falling drops of oil can be seen plainly from a distance. The auxiliary oiler (which is intended to be used in case the pressure supply should be discontinued or cut off) consists of the standard pattern "Sentinel" oil cup, the feeding of oil being regulated by the cam lever (C) in the same manner as with the



LUNKENHEIMER PRESSURE OIL CUP.

pressure supply. The auxiliary oiler has a large slide filler (B), which dispenses with the screw plugs used in other patterns. All parts about the cup are made of cast-not spun—brass. It is a heavy, substantial and durable device, simple in operation and practical in its applications. The Lunkenheimer Company, Cincinnati, Ohio, is its manufacturer.

Subscribe to the Manufacturers' Record. Price \$4 a year, or six months for \$2.

COTTONSEED OIL.

This department is open to the full and free discussion of trade topics and practical questions, and contributions are invited from men who are identified with this industry. Items of news are always acceptable.

Cottonseed at Memphis.

[Special Cor. Manufacturers' Record.]
Memphis, Tenn., March 25.

Quotations for cottonseed and cottonseed products, as posted on the Memphis Cotton Exchange today, were as follows: Cottonseed, bulk, rail or wagon, quiet at \$11 per ton; river, \$12; oil, carload lots, per gallon, firm at 26½ cents for prime crude, 24½ cents for off crude and 20½ cents for prime summer yellow; meal, 100-ton lots, per short ton, firm, with offerings light, at \$18.50 to \$18.75 for choice, \$18.25 to \$18.50 for prime and \$16.75 to \$17.25 for off; cake in similar quantities, nominal for choice and off, and firm for prime at \$18.50 to \$18.75; linters flat at 3½ to 3¾ cents for No. 2; No. 1 nominal.

Cottonseed-Oil Notes.

The New Albany Cotton Oil & Manufacturing Co. of New Albany, Miss., has been chartered. The officers of the company are Sam D. Owen, president; D. H. Hall, vice-president; H. E. Blakeslee, manager, and J. T. Swain, secretary and treasurer.

The Laurinburg Oil Co. of Laurinburg, N. C., has been chartered, with a capital stock of \$30,000. The company will manufacture cottonseed oil and all other products of cotton or cottonseed. The incorporators are A. L. James, A. A. James, James A. Jones and others.

The market for cottonseed products in Texas is quiet, with a moderate demand, and values about steady. Prime crude oil, loose, is quoted at 23 to 24 cents, and prime summer yellow oil at 26 to 26½ cents f. o. b. mill at interior points; prime cottonseed cake and meal, \$21 to \$21.25 per ton delivered at Galveston; linters, per pound, 3 to 3½ cents, and hulls, baled, \$4 per ton.

The following are the official quotations of cottonseed and cottonseed products, as posted at the New Orleans Cotton Exchange on the 27th inst.: Prime refined oil, in barrels, per gallon, 32½ cents; off refined oil, in barrels, per gallon, 31½ cents; prime crude oil, loose, per gallon, 27 cents; prime cottonseed cake, per ton of 2240 pounds, \$22.50; prime cottonseed meal, per ton of 2240 pounds, \$22.50; soap stock, per pound, 1.05 cents; linters, choice, per pound, 4½ cents; A, 3½ cents; B, 3½ cents; C, 3¼ cents; cottonseed in sacks delivered at New Orleans, per ton of 2000 pounds, \$14; in bulk delivered at New Orleans, per ton of 2000 pounds, \$13.

Cassier's Magazine of illustrated engineering has in its April issue the following articles: "The Russian Volunteer Fleet," by a staff correspondent; "American Soft Coal—Some Reasons for Its Growing Export," by Day Allen Willey; "Electric Vehicles vs. Tram Cars—A Possible Development of the Future," by Alton D. Adams; "Modern Types of British Locomotives," by C. J. Bowen Cooke; "American Transcontinental Railways," by Dr. James Douglas; "The Industrial Supremacy of Great Britain—Traditions and Other Adverse Influences," by James B. Alliot; "Hoisting Engines," by Joseph Horner, and "The Electric Motor for Speed Regulation," by Dr. S. S. Wheeler.

During the week ended March 3 the sales in the Joplin (Mo.) district amounted to 10,699,150 pounds of zinc ore and 1,222,800 pounds of lead ore, valued in all at \$161,620.

PHOSPHATES.

Phosphate Markets.

Office Manufacturers' Record,
Baltimore, Md., March 27.

While the local phosphate market is quiet, there is considerable inquiry for desirable grades of rock, and, as in all other fertilizer ingredients, the market is strong and holders generally firm in their views. The charters reported for the week indicate a fair movement from Southern phosphate ports. The following phosphate charters were reported: Schooner Malcolm B. Seaven, 1021 tons, from Tampa to Baltimore on private terms; a guarantee steamer, 4000 tons, from port Charlotte to Dublin at 15/6, July-August; schooners L. H. Brayton, 979 tons, and H. L. Baker, 720 tons, from Tampa to Baltimore or Philadelphia on private terms, and schooner George A. McFadden, 536 tons, same, option Carteret, N. J., and British bark St. Croix, 653 tons, from Grand Conetable Island to New York at \$2.75. At all points of production in the South phosphate rock is generally held firm, and miners are not disposed to make concessions in order to effect sales. This is especially true at Mt. Pleasant, Tenn., where the market is reported firm, but quiet. Throughout the Tennessee phosphate section the weather this month has been favorable for mining, which has been vigorously pushed. Sales of 70 per cent. Tennessee phosphate rock at Mt. Pleasant were reported last week at about \$2, and all other grades are strong at quotations. South Carolina rock is going forward to domestic ports, and the market is steady, with stocks still large, but are being gradually reduced. In Florida the situation is unchanged, and at all mining points there is considerable activity, with shipments from the ports keeping up fairly well. Both land and pebble phosphate is firm, with a better foreign inquiry.

Fertilizer Ingredients.

The tone of the market for leading ammoniates during the past week has been strong, with a fair inquiry from Eastern and Southern sources. Stocks of blood and tankage in the West are reported light and firmly held at outside figures. Spot and nearby parcels of nitrate of soda are firmer. Sulphate of ammonia is firm, with a fair demand.

The following table represents the prices current at this date:

Sulphate of ammonia (95%)	\$2.75	@ 2.80
Nitrate of soda, spot	2.00	@ 2.10
N. York.	1.85	@ —
Blood	2.45	@ 2.50
Azotine (beef)	2.47 1/2	@ 2.50
Azotine (fowl)	2.47 1/2	@ 2.50
Tankage (concentrated)	2.40	@ 2.42 1/2
Tankage (5 and 20)	2.37 1/2	@ 10 1/2 & 10
Tankage (7 and 20)	2.10	@ 21.50
Fish (dry)	27.50	@ 30.00

Phosphate and Fertilizer Notes.

The shipments of Tennessee phosphate rock from the port of Pensacola for the week ending the 19th inst. amounted to 5470 tons.

The British steamship Homewood cleared last week from Savannah, Ga., for Bremen with 1004 tons of high-grade Florida phosphate rock and other cargo.

At Spring Hill, Tenn., arrangements are now being made to reopen the Swift & Co. phosphate mines. The sheds are now filled with rock, which will be shipped this week, weather permitting.

It is reported that Messrs. H. T. Coleman and J. F. Horton, prominent capitalists of Philadelphia, have purchased a body of land on Sand mountain, just north of the town of Scottsboro, Ala., and will soon establish works to develop ochre properties. These capitalists represent the Alabama Coal Mining & Mineral Co. and the Alabama Ochre Co.

It is stated that the phosphate miners of South Florida have organized a company to build a railroad system over the entire lower portion of the State covered by the mines, with a terminal at Port Tampa, where the company has already secured land on which to erect terminals, elevators, etc., while all modern appliances will be introduced for handling large phosphate shipments.

Assistant State Geologist S. W. McCallie left Atlanta, Ga., last week for a trip down the Chattahoochee river in search of phosphates and marl. Reports have been received at the geological department that phosphate is abundant on the banks of the Chattahoochee, also that there are indications of marl. He will also inspect the Flint river. His report is awaited with considerable interest by phosphate men.

Scribner's Magazine for April, in addition to articles of travel, adventure and art by Walter A. Wyckoff, John Fox, Edwin Lord Weeks and others, contains six short stories, three of them by new writers and three by writers whose work is familiar in this Magazine. On its art side this number is also rich and varied. It has a colored cover by Foringer. It contains eight pages of illustrations by Frederic Dorr Steele, reproduced in color in a novel way to illustrate the story of a "Blue Ribbon Horse." The frontispiece, which is a very delicate pen-and-ink drawing by Peixotto, is reproduced with a tint; Edwin Lord Weeks, the traveler and artist, contributes a very elaborate illustrated article on "Two Centers of Moorish Art," which reveals his wonderful skill as a painter of Oriental subjects. Among the other artists are Christy, Yohn, Will H. Low and Henry McCarter. Altogether, both in the beauty and richness of its illustration and in the variety of its contents, this is a spring number of extraordinary attractiveness.

The great steel combination will be treated in the April number of The World's Work, with special reference to the three great factories in the gigantic undertaking centering about Messrs. Andrew Carnegie, J. Pierpont Morgan and Charles A. Schwab.

A dispatch from Wheeling, W. Va., says that a deal has been completed for the sale for \$400,000 of the coal rights on 25,000 acres of land between Glover's Gap and Board Tree Tunnel, in Wetzel county, West Virginia.

The Johnson Iron Works of New Orleans has been given a contract for the construction of two steel tugboats for use on the Mississippi river by the Morgan Steamship Co.

TRADE NOTES.

Property Wanted.—R. E. Watson of Atlanta, Ga., may be addressed relative to asbestos and corundum properties, which he desires to purchase. His advertisement will be found elsewhere.

From Havana.—The Havana Street Railway Co. is one of the customers of the Burt Manufacturing Co. of Akron, Ohio. The company recently gave an order for two 150-gallon Cross Oil Filters for the power-house it has constructed.

A Pennsylvania Order.—A recent order secured by the Sterling Boiler & Pipe Manufacturing Co. of Hartford, Conn., for the Sterling improved dust-collecting system and automatic furnace feeder is from the Hughesville Furniture Co. of Hughesville, Pa. The apparatus referred to is in demand from manufacturers who appreciate the advantages of such equipment.

Additional Orders.—Another long list of orders has recently been secured by the Fred W. Wolf Company of Chicago for its ice and refrigerating plants. They come from customers in Kansas City, Richmond, Va.,

Cleveland, Ohio, Omaha, Neb., and a number of other cities in Missouri, Montana, New Jersey and Illinois. The list includes a large order for a Holland patron.

A Good Thing for Draughtsmen.—The Dowman Manufacturing Co. of Atlanta, Ga., will be pleased to send a set of thumb-tacks to architects and others who may desire them. This company is well known on account of the cornices and other building material of which it makes a specialty.

For Purifying Water.—A recent order secured by the New York Continental Jewell Filtration Co., Mills Building, New York, is for a filtration plant for the East Jersey Water Co. at Little Falls, N. J. The plant is to have a total daily capacity of 32,000,000 gallons. George W. Fuller, 220 Broadway, New York, will be pleased to give detailed information to anyone interested.

All Over the Country.—Owing to the wide reputation enjoyed by the Case Manufacturing Co. of Columbus, Ohio, it secures orders from all parts of the country for its hoisting and other machinery. Recent orders are from James Leffel & Co. of Springfield, Ohio, for a 15-ton electric crane, and from the United States Cast Iron Pipe & Foundry Co. of Addyston, Ohio, for a 25-ton crane.

Enlarging Its Plant.—Expanding business has compelled the Siegrist Lubricator Co. to purchase additional property in St. Louis, where it will construct a four-story brick building, which will be used for the manufacture of its lubricators. Recent orders secured by the company are for the Anheuser-Busch Brewing Association of St. Louis and the plant of the Memphis Light & Power Co.

An Extensive Territory.—Recent orders received by the York Manufacturing Co. of York, Pa., for its ice-making and refrigerating machinery indicate that its trade territory is very extensive. The orders include equipment for Brooklyn, N. Y.; Mount Carmel, Ill.; Hattiesburg, Miss.; Fredericksburg, Va., and Abilene, Texas. An extensive foreign order comes from London for Messrs. Joseph Baker & Sons of that city.

Opportunity for Mining.—In another column will be found a reference to the sale of a coal mine in operation in Western Kentucky, the property including 2500 acres. Messrs. C. C. Christopher & Co. of Nashville, Tenn., may be addressed. This firm also has a large tract of undeveloped coal land in Western Kentucky and several pieces of property containing coal as well as timber in Tennessee, North Carolina and Alabama.

Running to Full Capacity.—This is the condition of affairs with the Armitage Manufacturing Co. of Richmond, Va., which has recently been obliged to install new machinery in its plant to keep up with the demand for its roofing material. The company's orders include roofing for the Anheuser-Busch Brewing Co., the Chesapeake & Ohio Railway Co., Worth & Co. of Petersburg, the Pullman Car Co. and the Southern Car & Foundry Co. The company reports its Southern patronage as very large.

Heating Roundhouses.—The system of heating and ventilation installed by the B. F. Sturtevant Company of Boston has been highly complimented by railroad officials, as it fills a long-felt want in roundhouses. The master-mechanic of the Chicago & Northwestern Railway Co. at Mason City, Iowa, writes that even in very cold weather, when ordinarily the roundhouse would be filled with steam after the locomotives have been taken off the road, by means of the Sturtevant system, which is used, the atmosphere is kept clear, and that when it is necessary to thaw out engines they can be made ready for service within an hour.

What Machinists Appreciate.—A paint which will give a good finish to metal work and, at the same time, be durable is a rare compound. The Pecora machinery paints, however, seem to fill these requirements. They are prepared in paste form for engines and general machinery, producing a flat steel color, also what is known as an eggshell gloss enamel finish. The claim is made that they become dustproof in ten minutes, drying hard in thirty minutes. The enamel paint is in liquid form and the steel paint in paste. Messrs. Charles H. Besly & Co., 10 and 12 North Canal street, Chicago, who are placing these paints on the market, also have a number of other specialties, including the Dresden Machine Enamel in various colors for gas radiators, gas engines, etc., iron fillers for making rough castings smooth and the noted Pecora blow-hole cement. This is a new preparation which can be used under the planer, file and other finishing apparatus. It is guaranteed to stand 200 degrees of heat, and is both gas and air tight.

TRADE LITERATURE.

Mechanical Draught.—Such is the title of the book recently issued by the American Blower Co. of Detroit, Mich., which will be sent on application to anyone interested.

Warmth and Comfort.—A very interesting series of photographs is contained in a pamphlet issued by the Speri Heater Co. of Carbondale, Pa., describing the various steam and hot-water heaters manufactured by this organization. They are utilized in dwellings and other buildings, and have become notable for their simplicity, durability and safety, as well as economy of fuel.

Preserving Leather.—Any compound which will lengthen the life of belting and other leather is thoroughly appreciated by manufacturers. This is probably one of the reasons for the popularity of the leather-belt dressing manufactured by Charles A. Schleren & Co. A recent pamphlet issued by this firm announces offices in New York, Chicago, Boston, Philadelphia and Pittsburg.

Tableware.—Everyone uses tableware, and consequently everyone is interested in cutlery. The catalogue recently issued by the Wyoming Cutlery Co. of Wilkesbarre, Pa., gives an intelligent idea of the extensive variety of knives and forks which are manufactured these days. The company itself has an enviable reputation for the quality of the metal which it uses and the style and finish of its goods.

Very Attractive.—From cover to cover the latest catalogue issued by the Sprague Electric Co., 527-531 West Thirty-fourth street, New York, is very artistic. It fully illustrates and describes the Lundell fan motors, for which this company has such a wide reputation. Some of the merits of the motors are their compactness, durability and simplicity of construction. For ventilating purposes they are especially desirable.

For Metal Users.—In a compact and convenient form the "Boiler Maker and Sheet Metal Worker" comes to hand with really a surprising amount of information considering its small size. Published by Messrs. Joseph T. Ryerson & Son of 18 Milwaukee avenue, Chicago, it gives a list of the metal work, bolts, boiler tubes, etc., which this firm manufactures, and contains some excellent papers upon topics of interest to the trade.

Wood-Rim Pulleys.—The merits of the Chase Wood Rim Pulley have given it such a widespread reputation that it hardly seems necessary for the Chase Pulley Co. to publish any description of it. However, the company has recently prepared a very artistic catalogue, which gives patrons an idea of the different varieties and sizes. A feature of the catalogue is comprised in the illustrations, which are of the highest order. A copy may be obtained by writing the company at Providence, R. I.

Around the World.—The Frick Company of Waynesboro, Pa., has a very appropriate illustration on the cover of its latest catalogue intending to represent the widespread market for its machinery, which literally reaches around the globe. Its engines, threshing and saw-mill machinery can be found in use all the way from the United States to Australia, and to prove this fact the catalogue is illustrated with excellent photographs showing its machinery in operation in different parts of the world.

The Use of Gas.—The value of gas for the production of power and for other purposes is increasing day by day, and the variety of uses to which it can be placed is really remarkable. Consequently the description of the Taylor gas producer recently published by Messrs. R. D. Wood & Co. of Philadelphia is of unusual interest. The pamphlet gives statistics showing the quantity of heat which can be generated by modern apparatus, and is profusely illustrated. The description will be sent to anyone who desires to correspond with Messrs. Wood & Co., who are located at 400 Chestnut street.

Everything Desired.—This is considerable to say, but apparently the catalogue recently issued by Messrs. T. B. Wood's Sons of Chambersburg, Pa., describes everything required in the way of power-transmitting machinery by users of such apparatus. The reputation which this firm has acquired has resulted from a long experience in business and the continual improvements which have been made in their specialties, which may be said to be up to date in every respect. Anything in the way of shafting, pulleys, hangers, clutches, couplings and rope transmission secured from this firm can be depended upon as of the best.

CONSTRUCTION DEPARTMENT.

*Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery Wanted."

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the Manufacturers' Record.

It often occurs that the organization of a new company in a town is not known by the postmaster, and hence letters addressed to the company are returned marked "not known." The Manufacturers' Record reports the first organization of all companies, and our readers, in seeking to get into communication with them, should be very careful in deciding how to address them, and it is often advisable to add the names of one or more incorporators as an aid to the postmaster in delivering mail.

The Yemassee Cotton Oil Co. has been organized, with capital stock of \$500,000, for the purpose of erecting cotton-oil mills in the "Cotton Belt." Parties interested who have good locations for oil mills may correspond with J. E. Stannard, manager, 38 Chase avenue, Springfield, Mass.

ALABAMA.

Birmingham—Coal Mines, Saw-mills, etc.—Allen P. Howison of Randolph, F. M. Jackson and E. J. Snyder of Birmingham and others have organized the Broadhead Coal Co., with capital stock of \$40,000, for the purpose of developing coal and ore mines, constructing and operating saw-mills, etc.

Birmingham—Coke Ovens.—It is reported that the Empire Coal & Coke Co., previously reported as developing coal mines near Democrat and to build a number of coke ovens, will commence work on the ovens at an early date. Address H. M. Milner, New Castle, Ala.

Birmingham—Street Paving.—C. M. Burkhalter & Co. have received contract for paving Eleventh avenue, south, with vitrified brick at a cost of \$33,000.

Birmingham—Foundry and Machine Shops. The Hood Machine & Foundry Co. is having plans made for a two-story fireproof building of steel, iron and brick, to be erected at a cost of \$30,000 and equipped with electric cranes and other machinery.

Birmingham—Steel and Shipbuilding Company.—The Alabama Steel & Shipbuilding Co. will hold a meeting to consider the increase of its capital stock from \$190,000 to \$1,000,000.

Birmingham—Plow Factory.—The Austin-Bryan Manufacturing Co. will erect two additional buildings for enlarging its plow works and install machinery for manufacturing handles, beams, etc.

Brewton—Broom Factory.—John Foshee contemplates establishing a broom factory with daily capacity of fifty dozen brooms.*

Gaylesville—Cotton Mill.—The establishment of a cotton mill is proposed, as reported recently; \$20,000 have been subscribed. Address A. D. Hudson.*

Huntsville—Plow Factory.—D. E. Tillman of Birmingham is negotiating for the establishment of a plow factory at Huntsville.

Mobile—Box Factory.—It is the intention of George F. Montgomery to establish a box factory of large capacity.*

Roanoke—Electric-light Plant and Water-works.—The city will hold an election April 1 to decide the issuance of \$35,000 of bonds for construction of electric-light plant and water-works lately reported; Z. J. Wright, mayor.

Scottsboro—Mineral Lands.—M. L. Rutter and John F. Horton of Philadelphia have purchased for \$12,000 coal lands and property said to contain ochre near Scottsboro, and will develop.

Selma—Oil Refinery, etc.—It is reported that about \$400,000 will be expended in the establishment of an oil refinery at Selma, and that there will be a number of smaller industries operated in connection with it, included in which is a soap factory and other plants to utilize the by-products from the refining process of the oil. Names of interested parties will be announced later.

Tuscaloosa—Box Factory.—E. B. Evans is investigating with a view to establishing a box factory at Tuscaloosa.

Tuscaloosa—Coal Mines, Iron Mines, etc.—The Central Iron & Coal Co. has been incorporated under New Jersey laws with Emil

Lehman, president, and Herbert Taylor, treasurer, both of New York, for the development of iron and coal lands near Tuscaloosa, for making pig-iron and to conduct a general foundry business. It is also reported that the company will build an iron furnace, provided certain conditions are complied with.

ARKANSAS.

Alma—Coal Mines.—Kansas City (Mo.) parties have organized the Arkansas Valley Mining Co., with capital stock of \$100,000, for the development of coal lands around Alma. Options on 4000 acres of land have been secured and prospecting commenced. Address for particulars J. E. London, Alma.

Center Point—Mining and Milling.—Chartered: The Kansas & Arkansas Mining & Milling Co., with capital stock of \$500,000, by Wm. P. Gulick, M. H. Malott, Thos. Parrish, John Gosnell and Frank H. Irons.

Center Point—Mining and Development Company.—Thos. Parrish, Frank H. Irons, James Y. Simpson, Chas. W. Wadsworth and others have incorporated the Kansas City Mining & Development Co., with capital stock of \$500,000.

Fayetteville—Telephone System.—J. E. London of Alma is interested in the organization of a company for the construction of a telephone system from Fayetteville to Fort Smith.

Fordyce—Electric-light Plant and Water-works.—The town contemplates establishing an electric-light plant and possibly water-works. Address C. McKee.*

Fort Smith—Brick, etc., Works.—The Choctaw Pressed Brick & Terra Cotta Co. has been incorporated, with capital stock of \$10,000, and W. O. Caldwell, president; Blair D. Mayo, Marion Westfall, H. B. Salls and others.

Greenville—Mercantile.—Chartered: The Greenville Store Co., with capital stock of \$10,000, by John C. Perry and others.

Newport—Mining and Milling.—The Big Three Mining & Milling Co. has been incorporated, with capital stock of \$300,000, by Percy Finch, president; I. J. Berry, vice-president, and R. M. Johnson, secretary and treasurer.

Pine Bluff—Woodworking Factory.—D. C. Cole & Co. of Kennett, Mo., reported during the week to establish a woodworking and lumber plant at Pine Bluff, state that for the present they will remain at Kennett.

West Fork—Lime Works.—A company is being organized in which J. E. London of Lima, Ark., is interested for the manufacture of lime at West Fork.

FLORIDA.

Baldwin—Saw-mill, etc.—R. V. Douglas of Brunswick, Ga., has, it is reported, purchased 21,000 acres of timber lands near Baldwin, and will erect a saw-mill for developing the property.

Fort Myers—Water-works, etc.—The city will vote April 15 on the issuance of \$15,000 of bonds for water-works (not \$20,000, as lately reported) and for street improvements. Address "The Mayor."

Inverness—Telephone System.—Chartered: The Florida Telegraph and Telephone Association, with capital stock of \$50,000, and privilege of increasing to \$25,000, to construct and operate telephone and telegraph lines, etc. William K. Jackson is president; James P. Wilson, vice-president, and J. M. Young, secretary and treasurer.

Lawtey—Saw-mill.—D. A. Backe is erecting a saw-mill.

Tampa—Telephone System.—M. Brorine and Guy Hoffman of Ohio have, it is said, organized a company, with capital stock of \$200,000, and completed arrangements for construction of an underground telephone system at Tampa.

GEORGIA.

Atlanta—Water-works Improvements.—It has been decided by popular vote to issue \$200,000 of bonds (previously reported) for putting in new water mains. Address "The Mayor."

Atlanta—Ore and Timberland Development, etc.—The North Georgia Mining & Milling Co. has been incorporated, with capital stock of \$2,500,000, and privilege of increasing to \$5,000,000, by J. K. Tillotson of New York city; A. M. Gammon of Corning, N. Y.; Spencer R. Atkinson, Henry Hull and A. J. Orme of Atlanta; company owns 30,000 acres of land in several Georgia counties on

which it will develop ore and timber, erecting mills, smelters, etc. It is also reported that the company will operate a plant for the manufacture of wooden articles.

Atlanta—Paper Company.—Albert Steiner, Jos. A. McCord and others have purchased the business of the Wellhouse Paper Co., as lately reported, and have applied for charter for the National Paper Co., with capital stock of \$40,000.

Augusta—Grocers' Supplies Factory, Co-op-erage, etc.—Thomas Barrett, Jr., P. S. North, L. G. Doughty, C. Cochran and others have incorporated the Grocers' Manufacturing Co. for the manufacture of vinegar, phosphates, cider, etc., and for the establishment and operation of a co-op-erage.

Columbus—Sash, Door and Blind Factory. W. T. Harvey & Co. is erecting an addition, as lately reported, two stories, 35x60 feet, and will install machinery for the manufacture of sash, doors and blinds.

Macon—Knitting Mill.—H. W. Thurston of Saddle River, N. J., is reported as investigating with a view to removing his knitting mill to Macon.

Stillmore—Machine Shops.—The Stillmore Air Line Railroad will erect a new brick and iron machine-shop building.

KENTUCKY.

Grayson County—Asphalt Mines.—The Truxal & Hensel Asphalt Co., 54 Courier-Journal Building, Louisville, Ky., has opened and is operating its mines in Grayson county.

Hartford—Power Plant.—A railway will be constructed from Hartford to Beaver Dam and electric-power installed. Address S. A. Anderson, secretary.

Louisville—Engine, etc., Works.—The Commercial Club is corresponding with parties desiring to locate a plant for the manufacture of marine and stationary engines and power launches in Louisville. Address Secretary J. C. Van Pelt.

Louisville—Distillery.—The H. A. Thierman Co. (distillers) has incorporated, with capital stock of \$50,000, by H. A. Thierman, William Rudeman, E. M. Babbitt and others.

Louisville—Telephone System.—The Louisville Home Telephone Co. has been incorporated, with capital stock of \$1,000,000, for construction of a telephone system, by Chas. J. Doherty, John A. Armstrong, Ellis M. Coleman and others. It was reported some time ago that franchise had been granted for construction of a system in Louisville.

Owensboro—Mercantile.—Chartered: The F. T. Gunther Grocery Co., with capital stock of \$40,000, by F. T. Gunther and others.

Owensboro—Chair Manufacturing.—The Combs Chair Manufacturing Co. has been incorporated, with capital stock of \$10,000.

Paducah—Gas Plant.—The Paducah gas plant, reported previously to be improved at a cost of \$20,000, has been purchased by Thomas Coffee of Peoria, Ill., who will, it is stated, make the improvements.

Smithland—Carriage Factory.—C. B. Davis and R. B. Cowper are interested in the establishment of a carriage factory.

Smithville—Power Plant.—The Louisville, Mt. Washington & Fairfield Electric Railway Co. will build its proposed power-house at Smithville. Judge W. B. Hoke, president, Louisville, Ky., will be addressed.

LOUISIANA.

Churchpoint—Wagon Factory.—A company has been organized, with H. Barousse, president; T. Guidry, vice-president; Laurent Barousse, secretary, and H. J. David, treasurer, for the establishment of a wagon factory.

Covington—Electric-light Plant.—The city has awarded contract for establishment of an electric-light plant to the St. Tammany Ice & Manufacturing Co., Limited.

Crowley—Iron Works.—The Arcadia Iron Works is again enlarging its plant by the erection of an addition 50x200 feet for increasing capacity.*

Iota—Rice Mill.—The Iota Rice Milling Co., Limited, has been incorporated, with capital stock of \$50,000, for the erection of a rice mill. C. C. Duson is president; Dr. L. A. Clark, vice-president; Jos. A. Sabatier, secretary and treasurer.

Napoleonville—Water-works.—Coleman & Malochee of New Orleans have been asked to prepare plans and specifications for the proposed water-works system at Napoleon-

ville (previously mentioned). Bids will be asked later.

New Orleans—Saw-mill, Planing Mill, etc. A. J. Cahill, John G. Alexander and others have incorporated the American Veneer Co., Limited, with capital stock of \$10,000, for the purpose of conducting general saw-mill, planing mill, lumber and veneer business.

New Orleans—Photo-engraving, etc., Company.—H. Romanski and others have incorporated the Romanski Photo-Engraving Co., Limited, with capital stock of \$5000, for conducting a general photo and color engraving, lithographing, etc., business.

New Orleans—Trunk Factory.—The Crescent Trunk Co. will erect a steam plant for the manufacture of trunks, valises and traveling bags, as recently reported; about 150 operatives will be employed.*

West Lake—Oil Lands, etc.—Rudolph Krouse, W. H. Managan, C. R. Smith, J. O. Stewart and others have organized the West Lake Prospecting Co. to prospect for oil, gas and minerals.

MARYLAND.

Baltimore—Car Works.—The Southwestern Equipment Co., incorporated under West Virginia laws, with capital stock of \$5,000,000, by Wilbur L. Ball, Joseph H. Cotton, Jr., Robert Walker, J. C. Bancroft, B. Davis and H. W. Babcock, all of New York, is authorized to construct locomotives and cars in Baltimore.

Baltimore—Live-stock.—Chartered: The Southern Horse Co., with capital of \$2000, for dealing in live-stock, by George C. Morrison and others.

Baltimore—Mercantile.—Chartered: The Modified & Sanitary Milk Co. of Baltimore City, by Daniel B. Chambers, John R. M. Staum, Walter W. Parker and others; capital stock \$2000.

Baltimore—Ice Plants.—The Hammond Ice Co., previously reported, has completed its organization, with O. Hammond, president and general manager; Charles T. Westcott, vice-president; F. J. Kohler, treasurer. The capital stock is \$2,000,000, and company will proceed with the erection of four ice plants, three to be located in Baltimore and one in Washington. Orders will be placed within the next few days for several thousand dollars' worth of machinery.

Barton—Mining.—J. M. Newman of Frederick, Md., has, with others, purchased the Sinclair mining property near Barton, as recently reported, and proposes to organize the Frostburg Coal Mining Co. for the purpose of developing the property, increasing the production as rapidly as possible. Among others mentioned in connection with the purchase are Henry N. Gitt of Hanover, Pa., and John S. Newman of Frederick. Address J. M. Newman.

Bethesda—Land Company.—The Bethesda Land Co. has been organized, with capital stock of \$70,000, by E. Baker Evans and Julian Hite Miller of the District of Columbia, William H. Talbott and Warren Choate of Montgomery county and others, for the purpose of dealing in real estate, erecting buildings, etc.

Cumberland—Paint Company.—The Allegany Paint Co. has been incorporated, with capital stock of \$25,000, for the manufacture of paints and varnishes, by Philip Smith, William C. Burrell, Dr. Thomas B. McDonald and others.

Frederick—Bending Works.—The Frederick Bending Works, reported recently as burned, will be rebuilt and new machinery installed.*

Westport—Foundry and Machine Shops. The Piedmont Foundry & Machine Co. has been incorporated, with capital stock of \$15,000, to conduct general foundry and machine business, by Robert Smith, James Smith and Charles T. Boon.

MISSISSIPPI.

Clarksdale—Mercantile.—Oscar Carr, Lang C. Allen, Jr., John W. Stovall and others have incorporated the Clarksdale Mercantile Co., with capital stock of \$25,000.

Collins—Shingle Mill.—The Hustler Manufacturing Co. has been organized for establishing a shingle mill, and will, it is said, later on add a gin and grist mill.

Crystal Springs—Mercantile.—A. Loterhos and others have incorporated the Crystal Springs Dry Goods Co., with capital stock of \$10,000.

Durant—Woodworking Factory.—The Durant Manufacturing Co. has purchased the plant of J. W. Morgan & Co., and, in addi-

tion to the manufacture of circled heading and dowel pins, will manufacture wagons, berry crates, axe handles, etc.; E. L. Langstaff, secretary.

Harriston—Mercantile.—Chartered: The McNair Mercantile Co., with capital stock of \$10,000.

Laurel—Mercantile.—The Laurel Mercantile Co., capital stock \$20,000, has been incorporated by T. B. Brown and others.

Meridian—Drug Company.—O. Lilleybeck, W. A. Stinebeck, W. R. Ferguson and others have incorporated the Lilleybeck-Stinebeck Drug Co., with capital stock of \$75,000.

New Albany—Oil Mill.—The New Albany Cotton Oil & Manufacturing Co. has been incorporated for operating the cotton-oil mill recently reported. Sam D. Owens is president; D. H. Hall, vice-president; H. E. Blakeslee, manager, and J. T. Swain, secretary and treasurer.

Oxford—Oil Mill, Brick, Tile and Ice Factory.—The establishment of an oil mill, brick, sewer tile and ice factory is contemplated. Address C. O. Wilkins.*

Yazoo City—Mercantile.—Chartered: The M. M. Brister Grocery Co., with capital stock of \$50,000, by M. M. Brister and others.

MISSOURI.

Cape Girardeau—Mercantile.—Chartered: The Nussbaum & Stehr Mercantile Co., capital stock \$12,000, by Henry Nussbaum, Henry A. Nussbaum and Charles W. Stehr.

Carthage—Mining Company.—J. H. Cook, V. L. Chester, C. A. Emery and L. E. Whitney have incorporated the J. H. Cook Mining Co., with capital stock of \$48,000.

Jefferson City—Telephone Company.—The Bell Telephone Co. of Missouri has increased its capital stock from \$2,000,000 to \$4,000,000.

Kahoka—Water-works System.—The water-works committee, John D. Thompson, chairman, has asked Geo. C. Morgan of Chicago, Ill., to prepare plans and estimates for the proposed water-works system at Kahoka.

Kansas City—Investment Company.—The Interior Investment Co. has been incorporated, with capital stock of \$10,000, by S. A. Darrugh, Paul Merrell, T. E. Reed and others.

St. Louis—Brewing Company.—The Union Brewing Co. has increased its capital stock from \$100,000 to \$150,000.

St. Louis—Soda-water Company.—The Ackerman Soda Water Co. has been incorporated, with capital stock of \$15,000, by Chas. F. Vogel and others.

St. Louis—Mercantile Engineering Company.—The Laufketter-Bendit Mercantile Engineering Co. has been incorporated, with capital stock of \$10,000, by Frederick C. Laufketter, Louis Bendit and Henry J. Roever.

St. Louis—Realty Company.—Chartered: The Alvin Realty Co., with capital stock of \$75,000, by Meyer Bauman, Morris Rich, Alvin L. Bauman and others.

St. Louis—Investment Company.—Ygnacio E. Loperena, Henry R. Hall, Charles O. Schultz, J. F. Gillen and others have incorporated the Loperena Estate & Investment Co., with capital stock of \$400,000.

St. Louis—Water-works Extension and Improvement.—The legislature has passed three bills appropriating \$200,000 for construction of a covered storage reservoir at Baden, \$175,000 for purchase of mains to extend system and \$50,000 for purchase of real estate for the storage of supplies. Address "The Mayor."

St. Louis—Woolen Mill and Clothing Factory.—The Mayfield Woolen Mills, recently reported as having purchased the old Kentucky Woolen Mills at Louisville, states that it will operate the plant for the present, until its buildings at St. Louis, now in course of construction, are completed, when this mill and its Mayfield (Ky.) mills will be removed to St. Louis. Company will also operate a large clothing factory in connection with these mills.

St. Louis—Bedding and Feather Company. John B. Retallock, Nelson H. Middleton and Frank L. Miller have incorporated the Missouri Bedding & Feather Co., with capital stock of \$7500.

NORTH CAROLINA.

Carthage—Planing Mills.—The planing mills of W. W. Mills at Carthage have been sold to J. W. Jackson, E. M. Tally and W. H. Webster, who will organize the South Carolina Lumber & Manufacturing Co. to operate same.

Charlotte—Electric-power Plant.—C. C. Howell and associates of Knoxville, Tenn., are making arrangements for the development of the Mott's shoals, about thirty miles from Charlotte, for the transmission of electric-power for lighting and manufac-

turing purposes. Power will, it is said, be transmitted to Charlotte, Salisbury and Concord.

Coleridge—Flour Mill.—Robert L. Caveness will enlarge the Richland Roller Mills, as reported recently, increasing from two to four stands and installing bolting, cleaning and packing machinery.*

Concord—Brick Works.—W. A. Wilkinson & Co., recently reported as incorporated, will establish a plant for the manufacture of bricks. Address W. A. Wilkinson.*

Davidson—Flour Mill.—The Davidson Milling Co., recently reported as incorporated under Charlotte, N. C., will build a roller flour mill at Davidson of forty to fifty barrels per day capacity, and a corn mill.*

Durham—Tobacco Factory.—The American Tobacco Co. (New York) has purchased the Blackwell Durham Smoking Tobacco Works at Durham.

Fayetteville—Steamboat Company.—Chartered: The Fayetteville Steamboat Co., with capital stock of \$25,000, by C. W. Cook of New York, W. L. Holt and W. M. Morgan of Fayetteville and others.

Greenville—Sash, Door and Blind Factory. F. M. Hodges and others are organizing a company for the establishment of a sash, door and blind factory.*

Henderson—Buggy Factory.—The Corbitt Buggy Co., reported during the week as incorporated, will begin the manufacture of buggies in about sixty days.

Hickory—Ice Plant.—The Hickory Milling Co. will install machinery for the manufacture of ice in connection with its roller mill.*

High Point—Milling.—The High Point Milling Co. has been incorporated, with capital stock of \$12,000, by A. B. Horney, W. K. Teague, O. N. Richardson and others, for establishment of a 100-barrel flour mill.

Laurinburg—Oil Mill and Ginnery.—The company reported recently as being organized for the establishment of a 40-ton cotton-seed-oil mill and a five 80-saw cotton gin, has incorporated as the Laurinburg Oil Co., with capital stock of not less than \$30,000. John F. McNair, C. S. McArthur, A. L. James and N. L. Henderson are among the incorporators. Address the first-named.

Lenoir—Cotton Mill.—The Lenoir Cotton Mill Co. has been formed, with M. M. Courtney, president; G. W. F. Harper, vice-president, and J. D. Moore of Gastonia, N. C., secretary and treasurer, for the establishment of the cotton mill mentioned during the week as projected by J. D. Moore. Building will be 200 feet long, to be increased to 300 feet later on and equipped with 2000 spindles, which will be increased to 6000 spindles. Capital stock is \$75,000. Address J. D. Moore in regard to machinery.

Lynn—Paper-box Factory.—F. P. Bacon has established a paper-box factory, and will operate as the Lynn Paper Box Co.*

Morgantown—Gold Mine.—It is reported that a Baltimore syndicate has purchased the Satterwhite gold mine, near Morgantown, and will erect plant to cost about \$8000 and work the property by steam shovel and sluice process to the extent of handling 600 tons of pay grit per day. Names of interested parties will be announced later.

Rocky Mount—Electric-light Plant, Sewerage, etc.—It has been decided by popular vote to issue the \$40,000 of bonds for electric-light plant and sewerage, previously reported. Address "The Mayor."

Rutherfordton—Cotton Mill.—The Cliffside Mills, reported recently as incorporated, with capital stock of \$80,000, has its mill in course of construction, and its principal place of business will be at Scruggs or Lovelace shoals on Second Broad river.

Spout Springs—Real Estate.—William Johnston, Liverpool, England, president of Johnston's Steamship Line, has purchased 20,035 acres of land near Spout Springs, and will probably develop. James F. Jordan, Greensboro, N. C., closed the deal.

Spray—Cotton Mill.—The Nantucket Mills, operating 754 looms, has increased its capital stock from \$125,000 to \$225,000 for the purpose of enlarging its plant.

Wadesboro—Laundry.—A steam laundry will be established. George W. Huntley is interested.

Warrenton—Furniture Factory.—The Warrenton Furniture Co. has been incorporated, with capital of \$1000, by W. B. Boyd, R. B. Boyd and others, for the establishment of a furniture factory.*

Winston-Salem—Cotton Mill.—A movement is on foot for the erection of a 100,000 cotton mill in North Winston on the co-operative plan. Names of interested parties will be announced later.

Worthville—Cotton Mill.—The Worth Manufacturing Co. has purchased the Engel-

worth Mills, as lately reported, and will in the near future operate it as mill No. 3.

SOUTH CAROLINA.

Alken—Artesian Well.—The city will dig a 10-inch artesian well and equip same with a pump for raising water 350 feet from below surface; P. A. Emanuel, mayor.*

Lanford Station—Oil Mill.—Efforts are being made for the establishment of a cotton-seed-oil mill. For particulars address Capt. J. W. Lanford.

Warrenville—Mattress Factory.—The Warrenville Mattress Co. has been incorporated, with capital stock of \$10,000, for the manufacture of mattresses, etc., by S. W. Howland of Warrenville and J. B. McMillan and J. M. Posey of Graniteville. Address S. W. Howland.*

TENNESSEE.

Bristol—Street Paving and Bridges.—The city of Bristol, Va. and Tenn., will pave streets aggregating about 12,000 or 15,000 square yards, and will construct two iron bridges, as recently reported. Address H. E. Jones, chairman finance committee.*

Brownsville—Mercantile.—The Phillips-Cathy Merchandise Co. has been incorporated, with capital stock of \$10,000, by John A. Cathy, Harriet L. Phillips, E. L. Douglass and others.

Chattanooga—Cigar Factory.—J. S. Cannon will establish a cigar factory at 606 East Ninth street.

Chattanooga—Drug Company.—John G. Rawlings, D. R. Rawlings, A. J. Watkins and others have incorporated the Rawlings Drug Co.

Chattanooga—Lumber-mill Improvements. The Willingham Lumber Co. is making improvements in its mill, installing additional machinery and increasing capacity.

Chattanooga—Chair Factory.—The Carlin Furniture Co., 1365 Market street, will erect a new brick building and install machinery for manufacturing chairs.

Cleveland—Ice Plant and Cannery.—J. B. Hargis contemplates the establishment of a five-ton ice plant and cannery factory.*

Harms—Hoop Factory.—The Standard Hoop Co. has been organized, with capital stock of \$3000, for establishment of a hoop factory. J. J. Roach is president; Charles Harms, vice-president, and J. Mack Eakin, secretary and treasurer.

Knoxville—Cold Storage, etc.—The Joseph Schiltz Brewing Co., Milwaukee, Wis., has had plans made and will shortly award contract for erection of a cold-storage plant and warehouse at Knoxville; building will be 50x120 feet.

Knoxville—Power Plant.—The Knoxville Electric Light & Power Co. will install additional machines to be used for incandescent purposes.

Knoxville—Telephone-exchange Building.—The People's Telephone & Telegraph Co., recently reported to issue improvement and extension bonds, has, it is stated, purchased site at \$3000 and will erect a fireproof building in which it will install its central exchange, workshops, battery-rooms, offices, etc.

La Follette—Lumber Mill.—F. G. Brown, manager of the timber department of the La Follette Coal, Iron & Railway Co., states that the company will erect a fourth mill for the further development of its timber resources in a short time.

Memphis—Elevator.—The elevator lately reported to be erected will be built by the Choctaw Mill & Elevator Co. of El Reno, Okla., which has increased its capital stock from \$20,000 to \$100,000, and will build an elevator of 100,000 bushels capacity. Contract will be awarded to Mr. Kaucher of St. Joseph, Mo.

Nashville—Saw-mill.—John B. Ransom & Co. will rebuild their saw-mill lately reported burned.

Nashville—Trunk Factory.—W. H. Redd, R. M. Dudley, J. M. Gray, Jr., and others have incorporated a company and purchased the Redd Trunk Factory in East Nashville. Plans have been completed for extensive improvements and enlargement of the plant.

Puryear—Flour Mill.—The Puryear Milling Co. will be organized, with capital stock of \$8000, for establishment of the flour mill lately reported. For particulars address M. L. Valentine.

Rally Hill—Pencil and Penholder Material Factory.—D. D. Jones is erecting a plant for the manufacture of pencil and penholder material, as reported recently.*

Ridgedale—Box Factory.—The Consignee Favorite Box Co. (established) has applied for charter, with capital stock of \$7500.

Shelbyville—Knitting Mill.—A company is being formed, with capital stock of \$25,000,

for the establishment of the hosiery knitting mill lately reported. W. L. Wilhoite is interested, and may be addressed regarding machinery, etc.*

Spring Hill—Phosphate Mines.—Arrangements are reported as being made for reopening Swift & Co.'s phosphate mines.

Sweetwater—Knitting Mills.—The Mascot Knitting Mills will, it is reported, increase capacity.

Waynesboro—Roller Mill Company.—T. N. Copeland, J. G. Ruse, J. J. Montague and others have incorporated the Clifton Roller Mill, with capital stock of \$10,000.

TEXAS.

Austin—Oil Company.—The Capital City Oil Co. has been incorporated, with capital stock of \$50,000, to prospect for oil and mineral products in Travis county. William Brangan, J. W. Oment of Anderson, Texas; J. P. Hamer and L. M. Mays of Austin are the incorporators.

Beaumont—Oil and Development Company.—Hal. W. Greer and F. W. Goodell of Beaumont, W. E. Brice of Mason City, Tenn., and others have organized the Eastern Texas Oil & Development Co., with capital stock of \$500,000, to lease and purchase land, prospect for oil, build and operate oil tanks, pipe lines, etc.

Beaumont—Real Estate.—The Beaumont Land & Improvement Co. has been incorporated, with capital stock of \$100,000, by Geo. W. Collier, W. H. Pope, James V. Polk and others, for the purpose of transacting loan and real estate business.

Bonham—Gin.—The Fannin County Gin Co. has been incorporated, with capital stock of \$20,000, by J. H. Dale, M. C. Dorset and Carey Murphy.

Bynum—Gin.—W. W. Boyd, Jim Boyd and Wallace Boyd have incorporated the Bynum Cotton Gin Co., with capital stock of \$20,000.

Caldwell—Broom Factory.—Harry Hudson contemplates the establishment of a broom factory with capacity of from sixty to seventy-five dozen brooms per day.

Campbell—Educational.—Chartered: The Henry College, with capital stock of \$100,000, by T. H. Bridges and others.

Claude—Textile Mill.—Emil Reck may establish a handkerchief and towel mill at Claude.

Cleburne—Light and Power Company.—J. B. Oliver, R. B. Stitche and S. C. Padelford have incorporated the Cleburne Light & Power Co., with capital stock of \$25,000.

Cumby—Telephone System.—The Hopkins County Telephone Co. has been incorporated, with capital of \$1000, for establishing an exchange.

Dallas—Mercantile.—Chartered: The Russell V. Rodgers Company, with capital stock of \$20,000, by Russell V. Rodgers and others.

Dallas—Cotton-oil Mill.—The Trinity Cotton Oil Co. intends to rebuild its seedhouse recently reported burned, but has made no definite arrangements.

Fort Worth—Live-stock.—Page Harris, Dallas, Texas, and others have incorporated the Swain Cattle Co., with capital stock of \$100,000.

Glenflore—Sugar Mill, etc.—C. H. Waterhouse of Glenflore has organized in Pittsburg, Pa., the Pittsburg-Glenflore Sugar Co., with capital stock of \$200,000, for the development of the sugar-cane industry of Southeastern Texas. A complete sugar mill will be erected and ready for grinding next October.

Greenville—Cotton-oil Refinery.—The Texas Refining Co. will make extensive improvements to its plant, including the installation of additional machinery, etc.; D. G. Dunlap, manager.*

Hillsboro C. H.—Cotton Gins.—W. W. Boyd, James Boyd, J. W. Reeves, Lem Hill and Wallace Boyd have incorporated the Reeves Cotton Gin Co., with capital stock of \$6000; the Farmers' Cotton Gin Co., with capital stock of \$10,000, and the Kirby Cotton Gin Co., with capital stock of \$6000, all of Hill county.

Jacksonville—Oil Lands.—A company will be organized for the development of oil lands. Names of interested parties will be announced later.

Jessie—Cotton Gin.—The Jessie Cotton Gin Co. has been incorporated, with capital stock of \$15,000, by W. W. Boyd, Jim Boyd, Wallace Boyd and others.

Krum—Mill and Elevator Company.—The Krum Mill & Elevator Co., with capital stock of \$20,000, has been incorporated by C. A. Davis, W. J. Jones, C. Bonta and others.

Lake Side—Sugar Mill and Refinery.—The Lake Side Sugar Refining Co. has been incorporated, with capital stock of \$200,000, for the establishment of a sugar mill and refinery,

by William Donovan of Lake Side; A. A. B. Woerheide, Edward H. Coffin, A. O. Rule, August Hoffman and others, all of St. Louis, Mo. Fireproof building of steel and iron will be erected, and it is said that contracts for machinery have been awarded.

Massey-Cotton Gin.—Chartered: The Massey Cotton Gin Co., with capital stock of \$2000, by E. W. Crow, Jim Boyd, W. W. Boyd and others.

Moscow-Oil Wells.—The Moscow Oil Co. has, it is said, been formed for the development of 10,000 acres of oil lands which it has recently secured.

Olive-Dry-kiln.—Olive, Sternberg & Co., reported recently as installing machinery for increasing capacity of their saw-mill, will also build dry-kiln in the near future.*

Orange—Telephone Improvement.—The Southwestern Telephone & Telegraph Co. will, it is reported, expend \$20,000 in enlarging, improving and rebuilding its system at Orange.

Orange—Oil Company.—The Chicago-Orange Oil Co. has been incorporated, with capital stock of \$100,000, by J. W. Link, Chas. M. Rein and L. Miller of Orange and others for developing oil lands, operating pipe lines, etc.

Peoria—Cotton Gin.—Chartered: The Peoria Cotton Gin Co., with capital stock of \$15,000, by W. W. Boyd, Guy C. West, Wallace Boyd and others.

Pittsburg—Pants Factory.—The Pittsburg Textile Manufacturing Co. (recently reported) is establishing pants factory.*

Port Arthur—Land and Oil Company.—The American Land & Oil Co. has been incorporated, with capital stock of \$200,000, to prospect for oil, build and operate tanks, pipe lines, etc., by E. F. Vilmer, A. J. M. Vuytke and R. M. Bos.

Purdum—Mercantile.—Chartered: The Purdum Mercantile Co., with capital stock of \$10,000, by William Ellis, J. S. Dill, W. A. Jackson and others.

Pursley-Cotton Gin and Grist Mill.—W. H. Brooks, L. Owens and M. W. Roberts have incorporated the Pursley Gin & Mill Co., with capital stock of \$10,000.

Rio Grande.—Chartered: The Casino Rio Grande by T. W. Kennedy and others.

Rockett-Gin Company.—The Rockett Gin Co., Limited, has been incorporated, with capital stock of \$8000, by A. C. Prude, S. H. Jolly, C. R. Graves and others.

Rusk-Brick Works.—The Rusk Brick Co. has been organized and will establish brick works of 35,000 pressed brick per day capacity; Theodore Miller, manager.

San Antonio—Coffee and Spice Company.—The San Antonio Coffee & Spice Mills Co. has been incorporated, with capital stock of \$10,000, by Geo. J. Dulling, Adolph Richter, Frank Gondor and others.

Sherman-Telephone System.—The Grayson County Telephone Co. has been chartered, with capital stock of \$150,000, for constructing and operating telephone exchanges and lines in Grayson county; incorporators, James F. Bralley of Manson, Ohio; W. A. Armstrong, F. B. McElroy and others of Sherman.

Sherman-Oil Company.—The Sherman Oil Co., with capital stock of \$5000, has been incorporated by Thomas Forbes, Jr., J. P. Geren, D. W. Gulick, F. B. McElroy and S. C. Moore.

Temple-Telephone Company.—The Bell County Telephone Co. has been incorporated, with capital stock of \$120,000, by James King Duffy of New York; James S. Bralley of Wauseon, Ohio; J. E. Boynton of Waco, Texas, and others for constructing and operating telephone system in various towns of Bell county.

Temple-Candy and Bottling Company.—Chartered: The Temple Candy and Bottling Works, capital stock \$10,000, by R. F. Smith, J. M. Collins, J. M. Booth and others.

Waco—Land and Improvement Company.—The Texas Land & Improvement Co. has been incorporated, with capital stock of \$30,000, by W. W. Seley, J. W. Riggins, Waco; J. D. Trammell and A. L. Bowers, Palestine.

Zavalla (P. O. Woodville)—Saw-mill, Gin and Grist Mill.—Amos J. Hodges will erect a saw-mill, gin and grist mill.*

VIRGINIA.

Alexandria—Pump Works.—The Emerson Pump Co. has been incorporated for the manufacture of pumps and to conduct a general business in mechanical devices; capital stock is \$500,000, and Henry P. Woodward, president; Richard Young, vice-president; Chas. E. Wood, secretary, and Robert H. Graham, treasurer, all of Washington, D. C.; principal office of the company is in Alexandria.

Berkley—Distillery.—Garrett & Co. of Welton, N. C., have purchased for \$30,500 waterfront site at Berkley, and will erect three-story structure for the manufacture of wine, brandy, etc.

Boykins—Box Factory.—G. A. Smith will, it is reported, establish a \$20,000 box factory and install an electric-light plant with capacity for lighting the city.

Chilhowie—Brick Company.—The Virginia Paving Brick Co. has been incorporated, with capital stock of \$100,000, by George E. Price, Harrison B. Smith, R. S. Spilman and others, all of Charleston, W. Va.

Damascus—Tannic-acid Works.—The Damascus Extract Bark Co. has been organized for the establishment of tannic-acid works to cost \$160,000 and to employ about 150 operatives. It was reported some time ago that J. C. Specht would establish tanning and dye-extract works at Damascus.

Clifton Forge—Telephone System.—The city has granted franchise to the Bell Telephone Co. for the construction of a long-distance system.

Hinton—Creamery.—The company reported lately as being formed for establishing a creamery will be known as the Hinton Creamery and Cheese Factory; M. H. Spitzer, president; S. F. Showalter, vice-president, and S. H. Heatwole, secretary and treasurer.

Newport News—Pier, etc.—The Hampton Roads Pier Co. has been incorporated, as recently reported, and has begun the construction of its proposed pier, which will extend 1400 feet; John H. Glickerson, secretary.

Norfolk—Telephone System Extension.—The Southern States Telephone Co., Seymour Mandelbaum of Baltimore, Md., president, operating exchanges at Norfolk and vicinity, will, it is reported, expend \$100,000 in improving and extending its system.

Norfolk—Mineral-water Company.—The Southern Mineral Water Co. has been incorporated, with capital stock of not less than \$5000 nor more than \$10,000, for the purpose of dealing in mineral waters. C. W. Feibress is president; R. G. Anderson, vice-president, and Vernon Crump of Portsmouth, Va., secretary and treasurer.

Norfolk—Box and Lumber Company.—The Virginia Box & Lumber Co. has been incorporated, with capital stock of \$25,000, for the manufacture of boxes; R. B. Cooke of Norfolk, president; A. H. Flint of Providence, R. I., vice-president, and H. M. Kerr of Norfolk, secretary and treasurer.

Norfolk—Granite Quarries.—The Fountain Creek Granite Co., reported during the week as having been incorporated for the development of granite quarries in Virginia and North Carolina, has established crusher with capacity of 300 to 500 tons of crushed stone per day.

Norfolk—Steel Plant.—The Wheeling Development Co. has been incorporated, with capital stock of \$100,000, and has, it is reported, purchased 150 acres of land near Norfolk, on the eastern branch of the Elizabeth river, and will build a large steel plant on the site. John T. Scott of Wheeling, W. Va., is president of the company, and George W. Dusch, also of Wheeling, is secretary and treasurer. Among others said to be interested are Birnie Scott of New York, C. W. Tebault of Norfolk, J. C. Gwynn, W. H. Anderson, John Conliff and others of Wheeling.

Petersburg—Gas Company.—The Petersburg Gas Co., previously reported as having been purchased by parties who would spend \$20,000 for improvements, has incorporated, with capital stock of \$250,000, and Richard D. Apperson of Staunton, Va., president; John D. Horsley, Lynchburg, vice-president, and F. H. Shelton of Philadelphia, Pa., secretary and treasurer.

Portsmouth—Terminals.—It is reported that the Southern Railway Co. has purchased waterfront property at Portsmouth on which it will build warehouses and wharves; W. H. Wells, Washington, D. C., engineer.

Richmond—Tin-box Factory.—The American Can Co., recently organized, has secured control of the Hasker-Marcuse Manufacturing Co. at Richmond, and will enlarge the plant for manufacturing tin boxes and tags.

Williamsburg—Water-works System.—The city will vote May 16 on issuance of \$30,000 of bonds (previously mentioned) for construction of water-works. Hite, Smith & Minshall of Norfolk have been authorized to make surveys. Address John L. Mercer, mayor.

Wytheville—Bridge.—The Norfolk & Western Railroad Co. will replace its bridge over Reed creek with a general masonry structure; L. E. Johnson, secretary, Roanoke, Va.

WEST VIRGINIA.

Hinton—Mercantile.—Chartered: The Hinton Merchandise Co., with capital stock of \$10,000, by Jacob Lowenstein and others.

Inwood—Stave Mill.—Ed. Lee Tabb is erecting additional buildings, and will install machinery for the manufacture of staves.

McDonald—Coal and Land Company.—The Crab Orchard Coal & Land Co. has been incorporated, with capital stock of \$103,000, by S. Dixon of McDonald, J. H. Gaines and Enoch Smith of Charleston and others.

Mercer—Manufacturing.—Chartered: The Pan-Electric Manufacturing Co., with authorized capital of \$100,000.

Welch—Saw-mills, Lands, etc.—The W. M. Ritter Lumber Co. has been incorporated by W. M. Ritter and R. E. Pendleton of Columbus, Ohio; James L. Hamill of Welch and others, to own and operate saw-mills and buy and sell timber lands; capital stock \$1000.

Wheeling—Publishing.—The German-American Printing Co. has been incorporated by Herman Zimmer, M. Kirchner and others for the purpose of publishing a newspaper; capital stock \$200,000.

Williamstown—Bridge.—The Williamstown Railroad, Bridge & Terminal Co., incorporated several months ago, has awarded contract for construction of a bridge connecting Williamstown, W. Va., and Marietta, Ohio, at an estimated cost of \$550,000.

BURNED.

Blackrock, Ark.—The freight elevator of the Kansas City, Fort Scott & Memphis Railroad.

Clarksville, Tenn.—G. Tandy Smith's saw-mill; loss \$10,000.

Clayton, Ga.—W. E. Thompson & Son's grist mill, shingle mill, bark mill and tannery; estimated loss \$5000.

Dalton, Ga.—Amos Keith's grist mill and cotton gin; estimated loss \$5000.

Florence, Ala.—The saw-mill of the Cypress Creek Manufacturing Co., near Florence; loss about \$3000.

Greenville, Miss.—Greenville Compress & Warehouse Co.'s compress; estimated loss \$10,000.

Greenville, Texas.—The Sherman, Shreveport & Southern Railway's machine shops and roundhouse; W. B. Munson, president.

Kendall, Ark.—Frank Kendall's planing mill; estimated loss \$12,000.

Kenova, W. Va.—Wilson & Leon's saw and planing mills; estimated loss \$20,000.

Leesville, La.—Leesville Lumber Co.'s dry-kiln.

Madisonville, Ky.—Hollman & Son's tobacco factories.

Normal, Ky.—J. W. Mahans' planing mill; estimated loss \$7000.

Paragould, Ark.—The plants of the Paragould Roller Mill Co. and the Rogers Planing Mill; total loss \$50,000.

Petersburg, Va.—The factory of the Independent Snuff Manufacturing Co.; estimated loss \$30,000.

Rolling Fork, Miss.—The D. L. Moore Lumber Co.'s planing mill at Booths.

St. Louis, Mo.—St. Louis Forge and Iron Works; loss \$100,000.

BUILDING NOTES.

Aiken, S. C.—City Hall and Opera-house.—The city will not build opera-house and city hall as recently reported; P. A. Emanuel, mayor.

Ashland, Va.—Hotel.—S. J. Doswell, J. E. Cox, I. N. Vaughn and E. L. C. Scott, all of Richmond, Va., have incorporated the Henry Clay Inn Co. for the erection of a hotel at Ashland, plans for which are about completed.

Atlanta, Ga.—Bank Building.—McKenzie & Son have received contract for erection of the proposed new bank building for the Georgia Railroad & Banking Co. (previously reported). Mowbray & Uffing of New York prepared the plans.

Atlanta, Ga.—Building.—Dr. E. L. Connally will, it is reported, erect a 12-story building of steel frame, constructed of marble and stone. Plans have not as yet been prepared.

Atlanta, Ga.—Office Building.—The George W. Scott Investment Co. and the Atlanta National Bank have incorporated the Century Building Co. of Atlanta, with capital stock of \$200,000, for erection of steel fireproof office building. Site has been purchased.

Atlanta, Ga.—Building.—W. D. Grant will erect four-story building to cost \$100,000, as lately reported. Address inquiries to Bruce & Morgan, architects.

Augusta, Ga.—Depot.—Thomas K. Scott, Joseph B. Cumming, Carlton Hillyer, John Walker Inman and others will incorporate the Augusta Union Station Co., with capital stock of \$75,000, for erection of a union passenger station in Augusta.

Baltimore, Md.—Bridge.—Permit has been granted to the Baltimore, Chesapeake & Atlantic Railway Co. for construction of its proposed elevated passenger bridge over Light street, previously mentioned.

Baltimore, Md.—Contract has been awarded to E. M. Noel at \$242,200 for erection of new Fifth Regiment Armory, previously reported.

Baton Rouge, La.—Hotel.—A stock company with capital of \$40,000 will be organized for erection of hotel. Names of interested parties will be announced later.

Bedford City, Va.—Bank Building.—The Lynchburg Trust and Savings Bank, Lynchburg, Va., will award contract for its building at Bedford City, lately reported, April 1; cost of building about \$8000.

Bessemer, Ala.—Church.—The Baptist congregation, Rev. W. R. Ivey, pastor, will soon begin the erection of its proposed \$10,000 edifice, plans for which have been completed.

Carthage, N. C.—Hotel.—The Summit Hotel Co. has been incorporated, with capital stock of \$4500, for erecting and managing hotels, etc., by W. J. Junge, P. H. Beck of Southern Pines, W. C. Petty, C. C. Graves and others.

Clarksville, Tenn.—Building.—Clarksville Lodge No. 601, B. P. O. Elks, will erect a \$10,000 building.

Cumberland, Md.—Hotel.—It is reported that George A. and Chas. W. Curtley of McKeesport, Pa., are investigating with a view to erecting a hotel in South Cumberland.

Dallas, Texas.—Armory.—The Trezevant Rifles will build an armory to cost \$2500 on site donated by the city.

Decatur, Ala.—Bridge.—The Southern Railway Co. will construct new drawbridge at Decatur, as lately reported. R. B. Pegram, assistant general manager, Washington, D. C.

Fort Washington, Md.—Boathouse.—Abe S. Bickham, major and quartermaster United States Volunteers, 419 North Washington street, Alexandria, Va., will receive sealed proposals until April 22 for constructing a frame boathouse at Fort Washington. Information regarding plans and specifications may be obtained at office of depot quartermaster, Baltimore, or at above office. Usual rights reserved.

Frederick, Md.—Lodge and Office Building.—The Masonic Temple Association will erect four-story structure 50x125 feet to contain offices and lodgerooms. The building will have steam heat, electric lights and elevator, and cost about \$35,000.

Groveton, Texas.—Hotel.—J. T. Patton of Oakwood has received contract for erection of hotel at Groveton for Mrs. Edith R. Smith.

Gulfport, Miss.—Auditorium.—Jennings & Murray have received contract for erection of the proposed Chautauqua Auditorium. Contract may also be awarded for the erection of hotel in connection with the auditorium.

Hillsboro, Texas.—Business Building.—A. L. Blanchard has let contract for business building 25x75 feet, to be built of white rock.

Hopkinsville, Ky.—School.—Plans have been accepted for two-story brick and stone school building to cost \$15,000. Address "The Mayor."

Huntsville, Ala.—Theater.—The company reported during the week as being organized by Frank Cox of St. Louis will be styled the Huntsville Theater Co.; capital stock will be \$25,000.

Huntsville, Ala.—Cotton-mill Building.—The directors of the Madison County Spinning Co. have awarded contract to the Fulcher Construction Co. of Nashville, Tenn., for erection of its mill building.

Key West, Fla.—Building.—Mordecai T. Endicott, chief of bureau of yards and docks, Navy Department, Washington, D. C., will receive sealed proposals until April 27 for construction of a two-story fireproof brick and steel building 160x80 feet at the naval station at Key West. For plans, specifications and forms of proposals address chief of bureau.

Lancaster, S. C.—Cotton-mill Building.—T. C. Thompson & Bros. have commenced the erection of the Lancaster Cotton Mill No. 2 at a cost of \$125,000.

Martinsburg, W. Va.—Messrs. Wilen will erect a two-story brick business building.

Memphis, Tenn.—Telephone Exchange Building.—The New Memphis Telephone Co., James Warren, general manager, has purchased site at \$5000 for erection of three-

story brick building to cost about \$20,000, to be used as telephone exchange. Contracts will be let when plans are completed.

Memphis, Tenn.—Hotel.—Chartered: The Delta Hotel Co., with capital stock of \$500, by W. H. Major, W. A. McGhee, W. C. Krider and others.

Mooresville, N. C.—Hotel.—Contract has been awarded to Brown Bros. for erection of the proposed hotel of Nisbet & Pressly; building will be two stories, of brick.

Morganton, N. C.—Sanatorium.—The Broad Oaks Sanatorium Co. has been incorporated, with capital stock of \$5000, and privilege of increasing to \$50,000, and has purchased building which it will remodel and enlarge as a sanatorium. Isaac M. Taylor, Felix M. Scroggs and John McCampbell are the incorporators. Address Isaac M. Taylor, president.

Natchez, Miss.—School.—The city has awarded contract to William Steltenroth at \$24,000 for erection of schoolhouse.

New Iberia, La.—Building.—New Iberia Lodge No. 554, B. P. O. Elks, contemplates the erection of a theater building to cost \$20,000.

New Martinsville, W. Va.—Courthouse.—Caldwell & Drake of Parkersburg have secured contract to complete the work on the New Martinsville courthouse (now building) at cost of \$60,000.

Norfolk, Va.—Pavilion.—Holtzclaw Bros. of Hampton, Va., have received contract for erection of a building at Norfolk-on-the-Roads, which is included in a number of improvements reported some time ago to be made at this place. Building will be two stories, 160x250 feet, and contract price \$31,500, exclusive of electric wiring.

Paducah, Ky.—Woodworking Factory.—The Lack Singletree Co. (established) will erect four-story brick factory.

Rayne, La.—Building.—Jas. A. Petty has contract for erecting a two-story brick building, 30x100 feet, for Mervine Kahn.

Richmond, Va.—Warehouse.—The Cottrell Saddlery Co. will erect a \$6000 warehouse.

Richmond, Va.—Natorium.—Andrew Pizani, Jr., will build a natorium, as reported lately; it will be equipped with electric, needle, plunge baths and swimming pool 75 x150 feet.

Rockville, Md.—Bank Building.—Thomas C. Croomes has received contract at \$5000 for erection of the Farmers' Banking & Trust Co.'s building, previously reported.

Rocky Mount, N. C.—Schools.—It has been decided by popular vote to issue \$15,000 of bonds for graded schools. Address "The Mayor."

Savannah, Ga.—Depots.—John M. Egan, president of the Central of Georgia Railway Co., states that the company expects to erect during this year a new depot at Monticello and Madison, Ga., and a large union depot at Columbus, Ga., and that the company has also arranged to build nine depots at stations along the Bruton & Pineora branch.

Selma, Ala.—Church.—Bids will be asked at once for erection of the \$25,000 church lately reported to be erected by the First Baptist congregation. Address E. Lomax.

Shepherdstown, W. Va.—College Building.—The Shepherd College, recently reported burned, will be rebuilt at a cost of \$33,000.

Shreveport, La.—Office Building.—Sealed proposals will be received at the office of the First National Bank Building Co., Limited, until April 30 for erection of a five-story fireproof office building. Drawings and specifications can be seen at office of the James Riley Gordon Co., architects, at Shreveport and at Dallas, Texas, and at Builders' Exchanges in St. Louis and Chicago.

RAILROAD CONSTRUCTION

Railways.

Addison, W. Va.—It is stated that the work of building the Holly River & Addison Railroad is to be resumed in the near future. John T. McGraw is interested in a company which is now promoting the enterprise. Mr. McGraw may be addressed at Grafton, W. Va. Jacob Fisher of Sutton, W. Va., is also interested.

Anderson, Texas.—The business men of Anderson have decided to aid the proposed railroad between Anderson and Stoneham, a distance of ten miles, by concessions of right of way and stock subscriptions. Hon. J. G. McDonald is one of the promoters of the enterprise.

Augusta, Ga.—The Augusta Union Station Co., recently organized to build a depot at Augusta, intends to construct a terminal

railroad about a half-mile in length to reach it. Among those interested in the company are Thomas K. Scott and Joseph B. Cummings.

Baton Rouge, La.—Hon. Robert A. Hart, mayor, writes the Manufacturers' Record that surveys have been made for the proposed railroad between Baton Rouge and Mobile and part of the right of way secured. The city will hold an election to decide the question of giving a bonus of \$50,000 in aid of the enterprise.

Beaumont, Texas.—The work of grading the extension of the Gulf, Beaumont & Kansas City Railroad from Rogan to San Augustine has been completed to Jasper, Texas, and track is to be laid to this point as soon as possible. L. J. Polk at Galveston is manager.

Brookfield, Mo.—The business men of Brookfield are interested in the plan to secure a connection with the Columbia, Huntsville & Northwestern Railroad, proposed between Columbia and Trenton, Mo. A branch about ten miles in length would be required to reach the town. C. L. Spaulding is one of the committee appointed in the interest of the project.

Brooksville, Ky.—Another plan to build an electric railroad in Kentucky is being promoted by Younger Alexander of Brooksville, who has recently secured a franchise to build between Brooksville, Mt. Olivet and Georgetown, where connection will be made with the Cincinnati Southern Railway.

Charleston, S. C.—Surveys have been made in the interest of the Charleston, Suburban & Summerville Railway being promoted between Charleston and Summerville by J. J. O'Connell and others.

Columbia, Mo.—The Columbia, Huntsville & Northwestern Railroad Co., recently organized, has elected C. H. Hammett president and general manager, Edward Austin, vice-president, and W. W. Knight, secretary. The estimated length of the road is 120 miles, and it is projected between Columbia and Trenton, Mo., through coal fields in Boone and adjacent counties. Surveys are now being made. The officers are located at Kansas City, Mo.

Crowley, La.—J. W. Orr, president of the Citizens' National Bank of Champaign, Ill., it is reported, is interested in a project to build a railroad from Crowley to Abbeville and several other towns in the State. The estimated length of the road is seventy-five miles.

Dalton, Ga.—A correspondent of the Manufacturers' Record writes that the Dalton & Alaculsa Railroad Co. includes several well-known citizens of Dalton, also M. S. Squires of Lestershire, N. Y., and C. A. Wilkinson of Binghamton, N. Y. Among the local parties interested is T. R. Jones of Dalton. The estimated length of the road is fifty-six miles, and it is intended to be built between Dalton and Blue Ridge, Ga.

Elkins, W. Va.—The Raine-Andrews Lumber Co. writes the Manufacturers' Record that it proposes building a railroad along a branch of the Cheat river, a distance of twenty-five miles, to reach timber land which it controls. The principal officers of the company will be located at Elkins. The company also may be addressed at Empire, Pa.

El Paso, Texas.—It is reported that another railroad to terminate at El Paso is being promoted by a syndicate which includes George J. Gould, president of the Missouri Pacific system. The line, if built, will extend from El Paso to Santa Fe, N. M.

Eureka Springs, Ark.—Tracklaying has been completed upon the St. Louis & North Arkansas Railroad between Eureka Springs and Harrison, and trains are now in operation.

Fitzgerald, Ga.—The business men of Fitzgerald have offered the necessary property for a depot and right of way through the city and suburbs to the Brunswick & Birmingham Railroad Co. If Fitzgerald is included on the route. The company is considering the proposition.

Fort Worth, Texas.—The Northern Texas Traction Co. has been organized to build an electric railroad between Dallas and Fort Worth. K. M. Vanzant is president. (It is understood that this is a different corporation from those already mentioned in the Manufacturers' Record as promoting lines between the cities mentioned.)

Fredericksburg, Va.—The Fredericksburg & Rappahannock Railroad Co., chartered by the State legislature, is being organized, and it is stated will soon begin the work of obtaining right of way. The offices of the company are to be located at Culpeper, Va.

Hagerstown, Md.—The county commissioners have been asked for a franchise by the Hagerstown Railway Co. to build its proposed extension to Boonsboro and other

towns. Christian W. Lynch of Hagerstown is president of the company.

Harrisonburg, Va.—E. W. Jackson, engineer and manager of the Chesapeake Western Railroad Co., writes the Manufacturers' Record that the contract for fourteen miles of extension let to Carpenter, Wright & Co. of Richmond, Va., is to be completed before September 1. James A. Paterson is superintendent of construction.

Hartford, Ky.—S. A. Anderson, secretary of the company promoting the railroad from Hartford to Beaver Dam, writes the Manufacturers' Record that it has been surveyed and will be a little over four miles in length. It is calculated to build this year.

Jackson, Miss.—The company promoting the Jackson, Columbus & Northeastern Railroad between Jackson and the Birmingham district of Alabama has reorganized by electing I. C. Enoch of Jackson, president; T. W. Brame, vice-president, and Edgar S. Wilson, secretary.

Jesup, Ga.—W. B. Dunham, general superintendent of the Plant Railway & Steamship Co., writes the Manufacturers' Record that surveys are now being made for a line between Jesup and Folkston stations, which may be built during the present year.

Keyser, W. Va.—The Potomac & Pocahontas Railway Co. has been incorporated to build between Keyser and Franklin, in Pendleton county, a distance of sixty-five miles. Among those interested are E. B. Reynolds of Keyser and Thomas G. Pownall of Cumberland, Md.

Kingwood, W. Va.—The work of grading the Morgantown & Kingwood Railroad has been resumed, and it is expected to complete it between the towns mentioned during the present year. George C. Sturgiss is president of the company.

Lampasas, Texas.—J. M. Howe, engineer of the Houston & Texas Central Railroad Co., writes the Manufacturers' Record that preliminary surveys have been made in the interest of an extension of the Austin & Northwestern Railroad to Lampasas, but nothing will be done until the legislature allows the Houston & Texas Central to absorb the Austin & Northwestern.

Laurel, Miss.—Relative to the Kingston & Central Mississippi Railroad, recently referred to in the Manufacturers' Record, it is stated that the extension under consideration to Merrill has been decided upon. It will be built from Laurel and at Merrill will connect with the Mobile, Jackson & Kansas City Railroad. A contract has been let for twenty-five miles of line. F. W. Pettibone at Laurel is president of the company.

Little Rock, Ark.—The Choctaw, Oklahoma & Gulf Railroad Co. has let a contract to construct freight-yards at Hartshorne, I. T., to P. McCadden of Memphis, Tenn.

Louisville, Ky.—The plan to construct an electric railroad between Louisville and Fairfield, Ky., has been revived and a company organized, with W. B. Hoke, president. The estimated distance is twenty-nine miles.

Malden, W. Va.—Bids will be received until April 3 for grading, mason work and trestle-work on the Campbell's Creek Railroad for a distance of twelve miles. M. W. Venable, engineer, may be addressed at Charleston, W. Va.

Morgantown, W. Va.—Surveys are nearly completed for the Monongahela River & Cassville Railroad between Morgantown and the coal deposits in Monongahela county. James B. Gaffney at Cumberland, Md., is engineer of the company.

Mountain City, Tenn.—The business men acting in the interest of the extension of the Virginia & Southwestern Railroad to Mountain City have made a formal request that the line be built. Cornelius Shields at Bristol, Tenn., is general manager of the railroad company.

Paris, Ky.—The Commercial Club of Paris has taken up the project of building an electric line between this town and several others in the vicinity. R. J. Neely is president.

Raleigh, N. C.—The North Carolina Construction Co. has been incorporated in New Jersey to build a railroad in North Carolina.

Richmond, Va.—The Richmond & Petersburg Electric Railway Co. has asked for a franchise to extend its electric line through certain streets of the city. The city council is now considering the application. W. E. Davis is general manager of the company constructing the road.

Richmond, Va.—A report is current that a second track will be completed upon the Richmond, Fredericksburg & Potomac throughout its entire length during the present year. A bridge across the Potomac river may also be built in connection with the im-

provement. E. T. D. Meyers at Richmond may be addressed.

Rush, Ark.—It is stated that construction work will soon begin on what is known as the Morning Star Railroad between Rush and Newport, Ark., an estimated distance of 100 miles. The line will traverse zinc deposits in Marion county and will be operated in connection with a line of steamers on the White river, where the eastern terminus—Newport—is located. Among those interested in the company is George H. Heafford, formerly connected with the Chicago & Northwestern Railroad Co. The principal offices of the company are located at Rush.

Smithton, Ark.—It is reported that the present owners of the Arkansas & Southwestern Railroad have determined to complete the extension originally intended to Hot Springs, and that contracts may be let in the near future. W. M. Grayson of St. Louis is president, and W. W. McLeod, vice-president. It is stated that the line will be operated in future as a part of the Gould system.

Sutton, W. Va.—S. A. Dutton of Sutton is interested in the West Virginia & Kentucky Coal & Iron Railroad, being promoted through Braxton and adjacent counties in West Virginia and Pike county, Kentucky. The capital stock is \$5,000,000.

Tampa, Fla.—Surveys have begun in the interest of the proposed electric line between Tampa and St. Petersburg. J. P. Martin is chief engineer of the company. Charles Orr of Cleveland, Ohio, is one of the directors.

Tampa, Fla.—The Land Pebble Phosphate Co., it is reported, has decided to construct a railroad system which will terminate at Tampa and reach a number of phosphate mines in South Florida. A. Haywood is general manager of the company.

Welch, W. Va.—The Southwest Virginia Railroad Co. has been incorporated to build the proposed line from the Tug river to a point on Coal river. The incorporators include L. C. Anderson of Charleston, W. Va., and A. Bell of West Liberty, W. Va.

Wheeling, W. Va.—The Wheeling & Elm Grove Railroad Co., it is reported, is considering the further extension of its electric line from Wheeling to the boundary line between West Virginia and Pennsylvania, a distance of sixteen miles.

Wheeling, W. Va.—The latest report concerning the Northern Ohio Valley Railway Co. is to the effect that work will begin upon its electric line between Wheeling and Wellsburg, Ohio, within the next ten days. The total distance is sixteen miles. John Arbenz, Jr., is one of the directors of the company.

Williamstown, W. Va.—It is reported that a contract has been let for the proposed bridge across the Ohio river between Williamstown and Marietta, Ohio, which will cost \$550,000. The bridge will be utilized by the Williamstown Bridge & Terminal Co., which will operate an electric road between Marietta, Williamstown and Parkersburg. Thomas F. Barrett of Parkersburg is one of the directors of the company.

Street Railways.

Paris, Texas.—Robert H. Connell, Fullerton Building, St. Louis, Mo., has become interested in the street railway system of Paris, and writes the Manufacturers' Record that it has been decided to change it for operation by electric motors.

Machinery, Proposals and Supplies Wanted.

Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The MANUFACTURERS' RECORD has received during the week the following particulars as to machinery that is wanted.

Bags.—Wanted—A strong and absolutely dustproof bag for export trade. Correspondence and samples solicited. Address Cherokee Ochre & Barytes Co., Atlanta, Ga.

Bed-spring Machinery.—W. B. Wight, care of Shelton Mills, Chattanooga, Tenn., wants to correspond with manufacturers of bed-spring machinery.

Belting.—See "Woodworking Machinery." Roller.—See "Road Machinery."

Boiler.—See "Woodworking Machinery."

Boiler and Engine.—See "Corn Mill."

Boiler and Engine.—See "Filtering Machine."

Boiler and Engine.—See "Mattress Machinery."

Boiler and Engine.—F. M. Hodges, Greenville, N. C., wants prices on 80-horse-power boiler and 50-horse-power engine.

Boilers.—Olive, Sternberg & Co., Olive, Texas, are in the market for two small or one large boiler for planing mill.

Boilers and Engines.—Chickasha Electric Light & Power Co., Tom Irving, manager, Chickasha, I. T., wants prices on boiler 54x18, Hartford inspection for 150 pounds steam pressure, stack one and one-half times area of flues seventy-five feet high; Corliss engine 12x36 for a boiler pressure of 150 pounds, heater, open pump, etc.; wants prices on two boilers.

Box Machinery.—See "Woodworking Machinery."

Brick and Tile Machinery.—See "Pug Mill."

Brick Machinery.—W. A. Wilkinson & Co., Concord, N. C., want to purchase brick machinery. Address W. A. Wilkinson.

Brick Machinery.—C. O. Wilkins, Oxford, Miss., wants catalogues and proposals on brick and sewer-tile machinery.

Brick Manufacturers.—See "Paving."

Bridges.—The city of Bristol, Va. and Tenn., will receive bids for constructing two iron bridges, plate-girder design, wood or concrete floor. Parties desiring to bid must submit design for inspection within the next ten days; contract to be let May 1; H. E. Jones, chairman finance committee.

Broom Machinery.—John Foshee, Brewton, Ala., wants information regarding broom machinery.

Builders' Materials.—Texas Refining Co., D. G. Dunlap, manager, Greenville, Texas, is in the market for steel for steel-frame building and about 500 squares of galvanized iron.

Canning Machinery.—J. B. Hargis, Cleveland, Tenn., wants prices on canning machinery.

Chair Manufacturers.—W. R. Melton, Watertown, Fla., wants to purchase an invalid chair.

Church Furniture.—John Fair, Newport News, Va., wants catalogues and prices on church pews.

Corn Mill.—The Davidson Milling Co., Davidson, N. C., is in the market for a corn mill and an engine and boiler of thirty to fifty horse-power.

Cotton Mill.—A. D. Hudson, Gaylesville, Ala., wants plans, specifications and bids on establishment of a cotton mill.

Cotton-mill Machinery.—Vance Cotton Mill Co., Chattanooga, Tenn., wants to buy a ball winder.

Cotton-mill Machinery.—W. T. Brown, Gaylesville, Ala., desires to correspond with manufacturers of cotton-mill machinery.

Cotton-oil Mill.—W. R. Young, Ruby, Miss., is in the market to buy machinery for cottonseed-oil mill and soap factory, new or second-hand.

Crescoting Machinery.—Manufacturers of crescoting machinery may address Chas. A. Hall, P. O. Box 166, Mobile, Ala.

Crusher.—See "Road Machinery."

Dredging.—Sealed proposals will be received until April 3 for the excavation and removal of about 335,000 cubic yards of material from harbor, docks, etc. Proposals to be sent to city register, city hall, Baltimore, Md., and addressed to the board of awards, and accompanied by certified check for \$500. For blank forms of proposals apply at the harbor board office. Usual rights reserved.

Electrical Equipment.—Sealed proposals will be received by board of awards, care of George N. Numsen, city register, Baltimore, Md., until April 3 for furnishing 600 junction box-frame castings, more or less, in accordance with specifications, which may be had at office of electrical commission; certified check for \$500 must accompany each bid; usual rights reserved; Chas. E. Phelps, Jr., chief engineer electrical commission.

Electric Fountain.—See "Filtering Machine."

Electric-light Plant.—C. McKee, Fordyce, Ark., wants estimates on electric-light plant from 300 to 500 lights and from fifteen to thirty arc lights; also on water-works system.

Electric Plant.—Crystal Ice Co., Tulsa, I. T., wants prices on electric-light outfit, including 20-light incandescent, wire, cord, sockets, lamps and everything complete ready for installing; new or second-hand.

Elevator.—Frederick Bending Works, Frederick, Md., wants freight elevator to lift 2000 pounds.

Engine.—South Side Railway & Development Co., Petersburg, Va., is in the market for 300 to 400-horse-power Corliss tandem compound belted engine.

Engine.—The Stras-Walton Company, Roanoke, Va., is in the market for one second-hand 15-ton logging engine, narrow gauge, suitable for running on wooden rails, Climax or Shay gear, the latter preferred.

Engine Equipment.—The Salisbury Ice & Fuel Co., Salisbury, N. C., will replace its slide-valve cylinder with a 32x32 cylinder with Corliss valve. Address Geo. R. Collins, Asheville, N. C.

Engine, etc.—H. B. F. Macfarland, Lansing H. Beach and John W. Ross, commissioners, Washington, D. C., will receive sealed proposals until April 6 for furnishing engine, wheel, shaft, etc., for harbor boat. Blank forms of proposals, specifications and all necessary information can be obtained at office of commissioners.

Filtering Machine.—Andrew Pizzini, Jr., Richmond, Va., will need a filtering machine capable of filtering and delivering 100,000 gallons of water every twenty-four hours; also wants an electric fountain to cost from \$1000 to \$2500, and probably an engine and boiler of about ten horse-power.

Flour-mill Machinery.—E. C. Herring, Garland, N. C., wants to purchase second-hand boiler.

Flour-mill Machinery.—T. A. Dobbins & Co., Venable, N. C., want to purchase flour-mill machinery.

Furniture.—See "Hospital Supplies."

Furniture Machinery.—Warrenton Furniture Co., Warrenton, N. C., will purchase machinery for the manufacture of furniture.

Furniture Manufacturers.—G. Hardy & Co., City Buildings, Nottingham, England, desire correspondence with furniture manufacturers, preferably those located on the Atlantic seaboard, with a view to obtaining parts of furniture for sale in England.

Gearing.—Robert L. Caveness, Coleridge, N. C., wants to buy a set of gearing, 36-inch mortise spur with wood teeth and 15-inch iron pinion with 4 or 4½-inch face, bore not over 1 15-16 inches.

Gin.—See "Grist Mill."

Ginney.—J. H. Pippin, Elizabeth, Miss., wants three-gin outfit complete.

Grist Mill.—Amos J. Hodges, Zavalla, P. O. Woodville, Texas, wants gin and grist-mill machinery.

Heating Apparatus.—Broadoaks Sanatorium Co., Isaac M. Taylor, president, Morganton, N. C., wants hot-water or low-pressure steam heating apparatus.

Heating Apparatus.—James Knox Taylor, supervising architect, Treasury Department, Washington, D. C., will receive sealed proposals until April 27 for furnishing heating apparatus complete in place for south outbuilding and stable at the United States Bureau of Engraving and Printing, in accordance with drawings and specifications, copies of which may be had at the discretion of supervising architect.

Hospital Supplies.—Broadoaks Sanatorium Co., Isaac M. Taylor, president, Morganton, N. C., wants furniture, bedding, supplies, cooking apparatus, etc., for hospital.

Ice Machinery.—Hickory Milling Co., Hickory, N. C., is in the market for 5 to 10-ton ice plant, new or second-hand.

Ice Plant.—C. O. Wilkins, Oxford, Miss., wants catalogues and proposals on ice-factory machinery.

Ice Plant.—J. B. Hargis, Cleveland, Tenn., wants prices on five-ton ice plant complete.

Knitting Mill.—W. L. Wilhoite, Shelbyville, Tenn., is negotiating for machinery and fixtures for a hosiery knitting mill.

Logging Engine.—See "Engine."

Machine Tools.—Arcadia Iron Works, Crowley, La., will be in the market for a bolt screw-cutting machine and a large drill press.

Machine Tool.—W. K. Henderson Iron Works, Shreveport, La., is in the market for a heavy engine lathe with 24-inch swing, 16-foot bed, with hollow spindle, compound rest, taper attachment, with turret on bed.

Machine Tools.—Davis Foundry and Machine Works, Rome, Ga., is in the market for second-hand engine lathes from 22 to 32-inch swing by 8 feet to 10 feet between centers.

Mattress Machinery.—S. W. Howland, Warrenton, S. C., wants to correspond with manufacturers of mattress machinery, including engine and boiler of from twenty to forty horse-power, new or second-hand.

Metal-working Machinery.—Crescent Bed Co., Limited, New Orleans, La., wants to purchase good second-hand planer or shaper, with about 12-inch bed.

Oil-mill Machinery.—C. O. Wilkins, Oxford, Miss., wants catalogues and proposals on cottonseed-oil-mill machinery.

Pants-factory Machinery.—See "Sewing Machines."

Paper.—Sealed proposals will be received at the Bureau of Engraving and Printing, Treasury Department, Washington, D. C., until May 6 to furnish during the fiscal year beginning July 1, 1901, distinctive paper for postage stamps. Paper must, in respect to composition, sizing, strength and calendering, be equal to the paper now in use, which can be seen at Bureau of Engraving and Printing. Blank forms, with specifications for proposals, will be furnished intending bidders on application to Wm. M. Meredith, director of bureau.

Paper-box Plant.—F. P. Bacon, Lynn, N. C., is in the market for strawboard, glazed paper, glue, etc.

Paving.—The city of Bristol, Va. and Tenn., wants estimates on paving streets aggregating 12,000 to 15,000 square yards, including grading, grouting and brick complete; also wants prices on first-grade vitrified brick per thousand f. o. b. Bristol, Tenn.

Piping.—Leaksville Cotton Mills, W. R. Walker, treasurer, Spray, N. C., wants 600 to 800 feet 10-inch cast-iron water pipe, 12-foot lengths, second-hand.

Plumbing.—Broadoaks Sanatorium Co., Isaac M. Taylor, president, Morganton, N. C., wants bath and closet plumbing supplies.

Pug Mill.—The Brick & Tile Manufacturing Co., New Berne, N. C., is in the market for a second-hand pug mill.

Pump.—P. A. Emanuel, mayor Aiken, S. C., wants information regarding a pump for raising water from 350 feet below surface.

Pumping Machinery.—Broadoaks Sanatorium Co., Isaac M. Taylor, president, Morganton, N. C., wants machinery (not wind-mill) for elevating water to supply tank from a well.

Railway Equipment.—Moore County Brick Co., Southern Pines, N. C., is in the market for some light T rail, weight from twelve to twenty pounds; second-hand.

Railway Equipment.—W. L. Rankin & Bro., Mars Bluff, S. C., wants about sixty-five tons of 20-pound steel T rail, either new or second-hand; wants quick delivery.

Refrigerating Machinery.—Texas Refining Co., D. G. Dunlap, manager, Greenville, Texas, is in the market for refrigerating machinery.

Rice Machinery.—L. Tillotson, 358-62 Dearborn street, Chicago, wants to correspond with manufacturers of rice-milling machinery and equipment.

Rice-mill Machinery.—W. R. Young, Ruby, Miss., wants to purchase rice-mill machinery, new or second-hand.

Road Machinery.—Rubino Healing Springs Co., Healing Springs, Va., is in the market for a second-hand rock crusher for building roads; want prices complete, including portable boiler, capacity twelve to fifteen tons daily.

Roofing.—Olive, Sternberg & Co., Olive, Texas, will want to purchase roofing.

Saw-mill.—Amos J. Hodges, Zavalla, P. O. Woodville, Texas, wants saw-mill machinery.

Saw-mill Machinery.—See "Woodworking Machinery."

Sewerage.—H. A. Bowman, chairman, Little Rock, Ark., will receive sealed proposals until April 6 for building of sewer, district No. 28, as per plans and specifications; usual rights reserved. Plans at office of W. E. Lenon, 323 West Second street.

Sewing Machines.—Pittsburg (Texas) Textile Manufacturing Co. is in the market for ten sewing machines and full equipment for making pants.

Shafting and Pulleys.—See "Woodworking Machinery."

Soap Machinery.—See "Cotton-oil Mill."

Soap Machinery.—Texas Refining Co., D. G. Dunlap, manager, Greenville, Texas, is in the market for soap-making machinery.

Steam-heating Plant.—Sealed proposals will be received at office of county commissioners until April 3 for supplying new furnace or repairing and refitting furnace now in use and making all necessary repairs and improvements in the steam-heating plant of the courthouse at Towson, Md.; usual rights reserved; James E. Green, chief clerk.

Street Letter Boxes.—Sealed proposals will be received until April 19 at Postoffice Department, Washington, D. C., in care of the

superintendent of the free delivery system, for furnishing street letter boxes for a period of four years. Specifications will be furnished upon application. Charles Emory Smith, postmaster-general.

Tank Cars.—See "Tanks."

Tanks.—Texas Refining Co., D. G. Dunlap, manager, Greenville, Texas, is in the market for iron storage tanks, tank cars, etc.

Tanks.—Sydnor Pump & Well Co., Richmond, Va., wants pressure tanks of various sizes from 50 to 500 gallons capacity, both galvanized and plain.

Telephone Equipment.—The Catoctin Telephone & Telegraph Co., Dr. Alvey J. Smith, president, Wolfsville, Md., wants twelve or fifteen miles of telephone wire, 425 wood brackets, 425 glass insulators, one mile of guy wire and six telephones.

Textile Machinery.—H. L. Hohlfield, Greensboro, N. C., wants the addresses of makers of jute-yarn spinning machinery.

Tile Machinery.—See "Brick Machinery."

Trunk Machinery.—Crescent Trunk Co., 210 St. Charles street, New Orleans, La., is in the market for machinery and material for the manufacture of trunks, valises, traveling bags, etc.

Typewriter Manufacturers.—Fogler Bros., 37 Marietta street, Atlanta, Ga., are in the market for shaving or grinding machine for grinding or shaving down rubber plates for typewriters.

Water-works.—See "Electric-light Plant."

Water-works and Sewerage.—Sealed proposals will be received until April 3 by the mayor and city council, Ocean City, Md., for construction and completion of water-works and sewerage in accordance with plans and specifications on file; certified check for \$500 must accompany each bid; bond required; usual rights reserved; John L. Streeter, clerk.

Water-works Equipment.—The Home Water Supply Co., Spartanburg, S. C., is in the market for water meters. Address John B. Cleveland, president.

Well Drilling.—R. Martin, secretary and treasurer, St. Martinsville, La., is in the market for machinery, derrick and tools necessary to bore deep well for oil.

Well Machine.—E. H. Wiley, Lurich, Va., is in the market for a 500-foot well machine.

Wire-fence Machinery.—J. M. T. Hamilton, Meridian, Miss., wants the addresses of manufacturers of wire-fence machinery for weaving a rectangular mesh; wants a machine to be operated by steam-power and capable of making a quantity of finished fencing.

Wiring System.—James Knox Taylor, supervising architect, Treasury Department, Washington, D. C., will receive sealed proposals until April 25 for the installation of an electric wiring system for the outbuildings of the United States Bureau of Engraving and Printing, in accordance with plans and specifications, copies of which may be obtained at above office at discretion of supervising architect.

Woodworking Machinery.—E. C. Herring, Garland, N. C., wants to buy second-hand lath machine.

Woodworking Machinery.—F. M. Hodges, Greenville, N. C., wants estimates on machinery for making sash, doors and blinds.

Woodworking Machinery.—Geo. W. Hart, Fields, La., is in the market for some second-hand saw-mill machinery and hoop-making machinery.

Woodworking Machinery.—I. Rich, Denmark, S. C., wants to correspond with manufacturers of lathe machinery of various descriptions, and with manufacturers of saws.

Woodworking Machinery.—Frederick Bending Works, Frederick, Md., wants automatic rim-bending machine, with forms, bands, etc., complete, rim-packing table, rim planer and beveler.

Woodworking Machinery.—D. D. Jones, Rally Hill, Tenn., is in the market for shafting, pulleys, belting, resaw, two pony planers, two swing cut-off saws and one railway cut-off saw; also for band-saw mill carrying not less than a six-foot wheel.

Woodworking Machinery.—George F. Montgomery, Mobile, Ala., wants to correspond with manufacturers of box-making machinery.

Woodworking Machinery.—E. R. Burt, Bliscoe, N. C., wants to correspond with manufacturers of machinery for making bent and sawed hames.

Woodworking Machinery.—E. S. Waters, Pantego, N. C., wants outfit for saw-mill of 20,000 per day capacity, one 60-horse-power return tubular boiler, also shingle-mill machinery (new or second-hand).

FINANCIAL NEWS.

The Manufacturers' Record invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

New Corporations.

The Bank of Vermillion, La., is to be reorganized as a national bank, and will be called the First National Bank of Abbeville, La.

A. B. Wilbor has been elected president, and J. M. Winston, cashier, of the First National Bank, recently organized at Gordon, Texas.

Arrangements are being made to organize a national bank at Westernport, Md., under the title of the First National Bank of Westernport.

N. C. Gauster and William C. Smith of Baltimore are interested in the March Building Association, organized with \$312,000 capital stock.

A. Y. Dolfeld and others have organized the Thirtieth German-American Building Association of Baltimore, with \$500,000 capital stock.

The Citizens' National Bank is the title of the bank recently organized at Jacksboro, Texas, with T. C. Phillips, president. F. H. Jones is cashier.

The Algiers Savings Bank, recently organized at Algiers, La., has begun business with \$50,000 capital stock. Leigh Carroll is president of the institution.

James Gore and George W. Albaugh are interested in the Reisterstown Savings Bank being organized at Reisterstown, Md., with \$10,000 capital stock.

The bank being organized at Abilene, Texas, is to be called the American National Bank, and will be capitalized at \$60,000. Local capitalists are interested in it.

The Commonwealth Trust Co., recently organized at St. Louis, Mo., has elected Charles H. Turner, president. The company has an authorized capital stock of \$3,000,000.

M. W. Taylor has been elected president; B. L. Jones, vice-president, and W. E. Hern, cashier, of the bank recently organized at Beaufort, N. C., with \$15,000 capital stock.

Randall Pope is president; R. D. Rowe, vice-president, and S. E. Cobb, cashier, of the Madison County Bank, recently organized at Madison, Fla. It is capitalized at \$30,000.

The Bank of Mt. Olive has been formed at Saratoga, Miss., with \$20,000 capital stock. T. J. Hubbard is president; J. B. Parkham, vice-president, and R. W. Foots, cashier.

The officers of the People's Bank of Orangeburg, S. C., recently chartered, are F. A. Adden, president; George H. Cornelson, vice-president, and H. C. Wannamaker, cashier and treasurer.

A dispatch from Pensacola, Fla., is to the effect that the banking company being organized in that city is to be called the American Savings Bank & Trust Co., and will be capitalized at \$20,000. Stockholders in the American National Bank of Pensacola, it is understood, are interested in the new company.

It is announced that the Southern States Trust Co. is the title of the corporation recently organized by the business men of Gaffney, S. C., which is capitalized at \$250,000. It is authorized to increase this amount to \$1,000,000 at any time desired. Among those interested are F. G. Stacy, president of the National Bank of Gaffney; W. C. Carpenter, secretary of the Gaffney Carpet Manufacturing Co., and Eli B. Springs of Charlotte, N. C.

New Securities.

Chicago investors have purchased \$30,000 in 5 per cent. bonds of Gadsden, Ala. M. W. Newman has recently purchased \$115,000 worth of 4 per cent. bonds of New Orleans, La., at 104.

The town of Bolivar, Mo., has voted in favor of issuing \$4000 in bonds for electric lights. The mayor may be addressed.

The First National Bank of Mobile, Ala., has purchased the issue of \$60,000 in 4 per cent. bonds of that city, paying 102.50.

The town of Weatherford, Texas, will vote March 30 on the question of issuing \$45,000 in bonds for improvements. Address the mayor.

The town of Monroe, N. C., will probably issue \$6000 in bonds in the near future at 5 per cent. interest. The mayor may be addressed.

Bids will be received until April 1 by H. J. Swindler, mayor, for an issue of \$10,000 in 5 per cent. improvement bonds of Newbern, Tenn.

Messrs. W. J. McDonald & Co. of Chicago have purchased the issue of \$12,500 worth of 6 per cent. improvement bonds of Russellville, Ala.

Proposals will be received until April 20 for the issue of \$40,000 in bonds of Huntsville, Ala. E. S. Fletcher, city clerk, may be addressed.

Messrs. F. R. Fulton & Co. of Chicago have purchased the issue of \$40,000 in 4½ per cent. bonds of Lauderdale county, Alabama, paying 105.25.

The town of Roanoke, Ala., will probably place on the market in April an issue of \$35,000 in 5 per cent. bonds. R. G. Rowland may be addressed.

Lunenburg county, Virginia, has been authorized to issue \$6000 in bonds by the legislature. The board of commissioners may be addressed at Lunenburg, Va.

The Paducah Banking Co. of Paducah, Ky., has decided to increase its capital stock to \$200,000. It will also secure authority to do business as a trust company.

An issue of \$23,000 in 4 per cent. improvement bonds will be sold at auction on March 26 by the city of Hagerstown, Md. A. Heinel, collector, may be addressed.

The total bond issue proposed by the city of Bristol, Tenn., will amount to \$45,000 if authority is given to place it on the market by the legislature. Address the mayor.

The city of Springfield, Mo., will probably place on the market in the near future an issue of \$35,000 in 4 per cent. bonds for improvements. The mayor may be addressed.

Bids will be received until April 10 for an issue of \$100,000 in 5 per cent. bonds of Caddo (La.) levee district. T. F. Bell, president of the board, may be addressed at Shreveport, La.

The school district of St. Joseph, Mo., will vote March 30 on the question of issuing \$150,000 in bonds for school purposes. The school board may be addressed at St. Joseph.

The citizens of Matagorda county, Texas, are considering an issue of \$40,000 in 5 per cent. bonds for improvements. The county commissioners may be addressed at Matagorda.

The Southern States Telephone Co. has given a mortgage to the Fidelity & Safe Deposit Co. of Baltimore to secure \$150,000 in 5 per cent. bonds. The company is constructing a line in Maryland and Virginia.

Hamilton county, Tennessee, has been authorized to issue \$100,000 in refunding bonds, and may place them on the market some time in May. The county commissioners may be addressed at Chattanooga, Tenn.

Bids for the issue of \$692,000 in 3½ per cent. refunding bonds of the city of Louisville, Ky., included investment firms in New York, Cincinnati, Cleveland, Chicago, as well as local firms. The Fidelity Trust & Safety Vault Co. of Louisville offers 108½ for the entire issue, and will probably be awarded all but the amount of \$41,000, for which 109 has been bid.

Financial Notes.

The National Bank of Commerce, Kansas City, Mo., has absorbed the Bank of Grand Avenue of the same city.

Arrangements have practically been completed to unite the Maryland and the Guardian trust companies of Baltimore under the title of the former organization. By the plan proposed the Maryland Company will have a capital stock of \$2,125,000 and surplus and undivided profits of \$3,185,000. It is understood that the present officers of the Maryland Company, Col. J. Willcox Brown, president, and J. Bernard Scott, secretary and treasurer, will continue in their present positions.

SOUTHERN COTTON-MILL STOCKS.

Quotations furnished by Hugh MacRae & Co., Wilmington, N. C., for Week Ending March 26.

	Bid.	Asked.
Abbeville Cotton Mills (S. C.)	99	99
Aiken Mfg. Co. (S. C.)	92	96
American Spinning Co. (S. C.)	102	102
Anderson Cotton Mills (S. C.)	127½	127½
Arden Cotton Mills (S. C.)	100	100
Arkwright Mills (S. C.)	120	125
Augusta Factory (Ga.)	80	85
Avondale Mills (Ala.)	85	85
Belton Mills (S. C.)	101½	104
Bennettsville Mfg. Co. (S. C.)	105	108
Cabarrus Cotton Mills (N. C.)	145	152
Cannon Mfg. Co. (N. C.)	175	186
Clifton Mfg. Co. (S. C.)	180	188
Clinton Cotton Mills (S. C.)	120	125
Courtenay Mfg. Co. (S. C.)	117	120
Dallas Mfg. Co. (Ala.)	101½	104
Darlington Mfg. Co. (S. C.)	96	100
Delgado Mills (N. C.)	97	100
Eagle & Phenix Mills (Ga.)	102	105
Enoree Mfg. Co. (S. C.)	114	118
Enterprise Mfg. Co. (Ga.)	100	103
F. W. Roe Mfg. Co. (S. C.)	116	120
Gaffney Mfg. Co. (S. C.)	115	116½
Granby Mills (S. C.)	101½	104
Granby Mills (S. C.) 1st Pfd.	101	106
Graniteville Mfg. Co. (S. C.)	103	107
Greenwood Cotton Mills (S. C.)	99	103½
Grendel Mills (S. C.)	100	103
Henderson Cotton Mills (N. C.)	120	125
Henrietta Mills (N. C.)	196	210
John P. King Mfg. Co. (Ga.)	100	103
Langley Mfg. Co. (S. C.)	112	118
Laurens Cotton Mills (S. C.)	140	145
Lockhart Mills (S. C.)	107½	110
Louise Mills (N. C.)	103	106
Lynchburg Cotton Mills (Va.)	125	150
Lynchburg Cot. Mills (Va.) Pfd.	145	150
Manchester Cotton Mills (S. C.)	104	104
Mayo Mills (N. C.)	130	135
McColl Mfg. Co. (S. C.)	120	122
Modena Cotton Mills (N. C.)	140	145
Newberry Cotton Mills (S. C.)	115	122
Odell Mfg. Co. (N. C.)	108	112
Orr Cotton Mills (S. C.)	100	104½
Pacolet Mfg. Co. (S. C.)	205	205
Pelzer Mfg. Co. (S. C.)	180	190
Piedmont Mfg. Co. (S. C.)	175	182
Raleigh Cotton Mills (N. C.)	100	103
Richland Cotton Mills (S. C.)	105	105
Richland Cotton Mills (S. C.) Pfd.	100	103
Roanoke Mills (N. C.)	103	103
Sibley Mfg. Co. (Ga.)	82	86
Southern Cotton Mills (S. C.)	97½	102½
Spartan Mills (S. C.)	140	145
Trion Mfg. Co. (Ga.)	125	135
Tucuman Mills Co. (S. C.)	135	135
Union Cotton Mills (S. C.)	135	135
Union Cotton Mills (S. C.) Pfd.	103	107
Victor Mfg. Co. (S. C.)	107	107
Warren Mfg. Co. (S. C.)	88	92
Warren Mfg. Co. (S. C.) Pfd.	105	105
Whitney Mfg. Co. (S. C.)	117	127
Wilmington Cot. Mills (N. C.) Pfd.	105	110
Wiscasset Mills (N. C.)	120	120

Anything and Everything.—Apparently one can get anything he needs from the Chicago House Wrecking Co. If its monthly bulletin is any indication. The bulletin for March contains several pages of testimonials from patrons who have found what they wanted in the way of building material, machinery, etc. The company can be reached by mail at West Thirty-fifth and Iron streets, Chicago.

Much in Little.—This phrase is very appropriate to the catalogue of electrical and steam machinery recently published by Messrs. Rossiter, MacGovern & Co. of 141 Broadway, New York. The electrical machinery made by this concern is referred to at length in the pamphlet, which, although of small size, is replete with very valuable information to users of steam and electrical apparatus.

Very Artistic.—The latest catalogue issued by the H. W. Caldwell & Son Co. of Chicago truly merits this compliment. Owing to the extensive variety of elevating, conveying and power transmitting machinery as

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well as other apparatus which the company manufactures, to give an intelligent idea of its various devices many pages are needed, but no expense has been spared in the arrangement and preparation of a book which is up to the highest standard. The cover is not only novel, but very ornamental in design, containing illustrations in relief on a background of silver tint. The paper is very heavy and of a quality which enables the illustrator to produce excellent engravings and woodcuts. As in previous numbers, the company has embodied a large amount of statistical information not only in price-lists, but in the sizes of its various kinds of machinery. An idea of the broad scope of its trade can be gained when it is stated that among its customers are companies operating flour mills, grain elevators, cottonseed-oil mills, starch works, breweries, distilleries, malthouses, sugar refineries, glucose works, cement works and tanneries.

Are You Going to the Pan-American?

If so, the Lackawanna Railroad offers the best and cleanest route between New York and Buffalo. The dining cars are admitted to be second to none in the world, either in point of excellence or in point of service. Meals are a la carte, which means: "Order what you want and pay only for what you order."